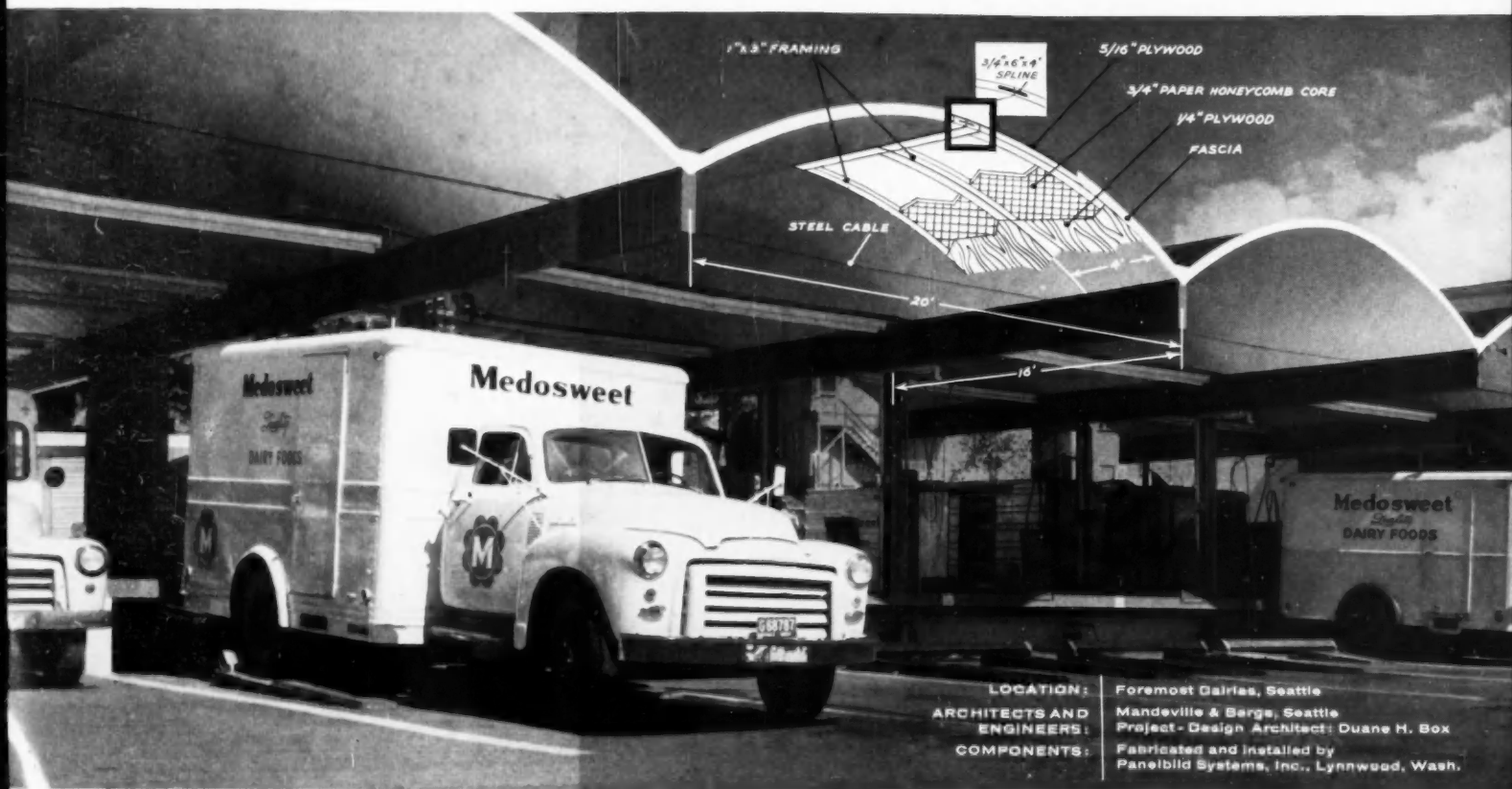


An abstract collage artwork featuring various textures and colors. A light gray, textured rectangular shape is at the top center. Below it, a dark, textured shape with a scalloped top edge is visible. To the right of this dark shape is a dark gray, textured rectangular area. In the lower right, there is a small, irregular white shape. The overall composition is layered and textured.

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DORE ASHTON

David Smith's dreams come in all sizes. When they are grand, their grandeur smites the eye of the beholder. When they are trivial, the beholder must be forbearing, for Smith's dreams are serialized and must be seen as an unending sequence. He has left nothing behind. What was dear to him in his youth is still dear to him and is carried again and again into his sculptures, each time with a fresh determination to "fix" the dream.

This art of recapitulation, of inspired tinkering, has a cumulative virtue. Smith's rioting imagination annexes everything it has seen and reconstructs it. His process is and has always been that of a constructor. And in this, he is faithful to his original choices in the early 1930s when he adopted the cubist vision.

This is not to say that Smith is a cubist. Rather, he, like the cubists and later the constructivists, saw the possibilities of using independent, virtual forms and knew that this suited his builder's impulse. In his work, no form was to merge softly with another, but was to be fitted and adjusted.

When Naum Gabo was asked to explain the origin of constructivism, he said that the sculptors in his little group never thought of themselves as constructivists. They simply knew they were constructors who put together their sculptures as an engineer puts together his models. Smith feels the same way. "The equipment I use," he has written, "my supply of material comes from factory study, and duplicates as nearly as possible the production equipment used in making a locomotive."

The attitude of the constructivist goes straight back to Picasso who first talked of the "tableau objet," the picture that was virtually itself. The Russian sculptors informed by Picasso's cubism then began to talk of "neutral" forms, of reducing their elements as much as possible to basic geometric shapes. They also made a point of using common industrial materials, unvarnished and bluntly presented as what they were. Smith drew on all these earlier 20th-century attitudes and added a few of his own. The importance of his full body of work is that it not only throws us back to each 20th-century source, but it launches us forward into the lifelong dream that is David Smith's own. He is among the soloists in an anvil chorus that includes Tatlin, Rodchenko, Picasso, Gargallo and Gonzalez.

In his huge exhibition at French & Company—forty-four pieces in three years—Smith shows us the numerical plenitude of his form repertoire. Just about every combination he has ever contrived is further elaborated. There are, however, a few giants that seem to have sprung up whole, unprepared by anything Smith has done before. They stand in the chic French & Company showrooms with the unease of a new tractor in an exhibition

David Smith



David Smith  
"Raven V" 1959, 58 3/4" high



"3 Circles Related"  
1958-59, 69 1/2" high

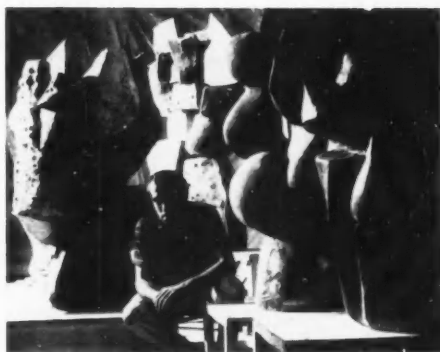
hall. Such superb semaphores belong to the American landscape. They are semaphores at rest: their ovals and disks set high above us remind us of what they *could* mean, but, like the arms and lights of a real semaphore in repose, they only hold the possibility of meaning. It is precisely the tension between the form—that of a sign—and its potential meaning that distin-

guishes these steel mammoths (more than 12 feet high) from Smith's earlier signals.

With their stainless steel surfaces burnished in great circular sweeps, it is not hard to imagine the *éclat* of the upcountry sun veering off, or the illusion of the wind turning them on their axes. In the largeness of his ambition, Smith has used a technique going back to the Renaissance, turning his forms very slightly and elongating their oval shapes so that when seen from below, there is a subtle turning illusion, a dynamic action between eye and form that adds to the impression of monumentality.

Smith's earlier signals are more like hieroglyphs. His "Agricola" series continues from the last show, spelling out quite different experiences. The "found objects" are no longer so important. In these, the stalk on which the essentially linear sculptures stand is relatively short. Their forms range anywhere from bell-and-clapper motifs (the disc at the end of a curving arm being the clapper) to a spherical composition resembling an astronomer's instrument. Occasional surrealist overtones creep into these smaller compositions of forged and welded steel, sometimes wittily, sometimes in banal contexts made particularly vulgar by Smith's perverse love for high green patinas. But that's all part of the humor of Smith's experimental game and must be allowed for.

I liked particularly a series he calls "Raven." In this group Smith develops the weather-vane idea that has always interested



Peter Voulkos in his studio  
Courtesy Felix Landau Gallery



Photograph by Edward Menechey

Fritz Bultman  
Triune

him. But instead of linear, sometimes over-detailed vanes, we now have a dense cluster of steel set on thin, burnished stalks that remind me of the impressive series of "Forgings" he made a few years back. All of the ravens wing swiftly. Long steel bars suggest speed while bent lines give them the poised spring of a Bambara antelope. The surfaces are grainy, pebbled, and grayish in several pieces, giving the trills of heavy steel a lightness commensurate with the motif.

An odd departure is the "Albany" series. These heavy, inch-thick compositions are stovepolish black and uncompromisingly geometric. They deliberately remind us of the steel saw, cut-outs, or negatives, answer positives—the solid discs and rectangles. Some are sequences of discs put together like a Delaunay painting. Others are more like the sharp wood constructions that grew out of cubism and were later debased into what I call 1930 movie lobby style. Solid as these are, I had the feeling that the "putting together" part was too important to Smith.

The most successful use of cut-out sequences and straightforward geometrization occurs in a piece of no little wit, "Three Circles Related." Like many of Smith's standing sculptures, it retains the suggestion of the figure. But the disc that is the head, the empty circle that is the chest and the twin cut-out circles, like binoculars, that are the pelvis are hung together with wonderful fantasy. A zig-zag composition provides the dynamics of the piece, but it is the matching up of disparate cut-outs that provides the chuckle.

I know of no way to conclude this runthrough. Smith has always left me short of breath, and this instance is no exception.

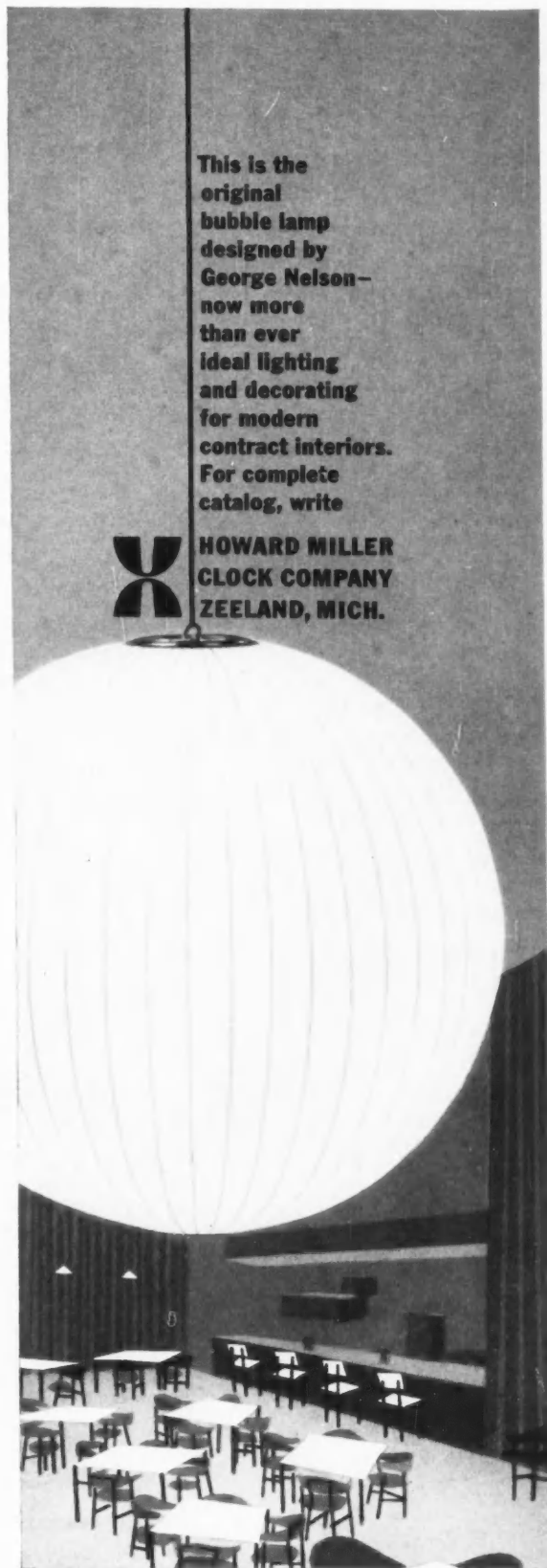
• • •

Quite another matter are the sculptures by Fritz Bultman at the Gallery Mayer. As a painter, Bultman has worked for the past few years in the amorphous lyric branch of abstract expressionism. I was surprised to find his sculptures tough, directly

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charged with meanings, and suggesting a really interesting personal history.

Bultman is not a constructor. He is more interested in metamorphoses of form that occur within an invisible but given cubic context. His pieces are built first in plaster and then cast in bronze. They emerge with a solid unity in which even the invisible planes relating open forms are clearly indicated.

I said that his sculptures are charged with meanings. But I didn't want to suggest that the meanings can be easily deciphered. On the contrary, meanings cling to Bultman's sculptures because somewhere, sometime they occupied his imagination. By the time his sculptures have thoroughly evolved, there is only an echo of meaning that we receive intuitively. Certainly Bultman's interests—surrealism, primitive sculptures, archaic Mediterranean and Japanese art, have enriched his work. But his allusions to these loves are not obvious in his work.

His early inquiries are represented in the show by a 1952 cast aluminum piece significantly titled "Solar." Here, the suggestion of mask, of pectoral bones, and the fetish-like crackling of surface clearly indicate his desire to make a thing that has the magic of primitive idols. But he did not succeed. Conceptual uncertainty and a failure of craft mark this early piece.

By 1955, however, Bultman had sublimated his reference to primitive fetish. The forms growing under his hands begin to assert themselves, freed from obvious associations. There are still bones, animal and vegetal shapes implicit in the long curves, but they are secondary references.

Perhaps they might better be called quotations milled by Bultman's own imagination. In the case of bronzes mounted on tall slender poles, for instance, there is unmistakable reference to Sardinian and Etruscan bronzes. The one has a hatchet-shaped terminal, driving it forward. The other, antlered, is balanced dexterously like a well-aimed arrow. Obviously there are mythical meanings inhering in such forms. But Bultman knows the boundaries of literature and sculpture. The mythos he dreams for his plastic vocabulary is reticent.

Still another kind of sculpture is represented by Peter Voulkos whose exhibition of ceramic pieces at the Museum of Modern Art confirmed my earlier conviction that Voulkos is unique in the ceramic field. The great pots that I had seen three years ago, bellying into space with such irrepressible audacity, were transformed in this exhibition into large sculptures.

Everything in the monoliths Voulkos showed seemed to have grown with the inherent grace and rhythm of a pot on the wheel. Voulkos pulls his shapes from his materials with unerring instinct. The walls of his boulder-like forms are thick, but their inner structure is felt all the way.

There were several slightly smaller sculptures—though still astonishingly large considering that they must be fired—in which Voulkos has experimented with pierced walls, baroque spiralling forms and deep undercutting. These he enhanced with varied glazes, deep blue in the interstices, ochre-to-gray on the curving walls. When necessary, he incises graffiti on his surfaces, but sparingly and only to stress textural progressions in the glazes.

It seems to me that the organic approach ceramic sculpture necessitates has been too long neglected. The hegemony of the constructors ought to be challenged more often in Voulkos' effective manner.

Finally, on the unusually full calendar of sculpture this month, there was Bernard Rosenthal's exhibition at the Catherine Viviano Gallery. There isn't much I can add to Jules Langsner's insights in a recent issue of Arts & Architecture, except that I believe Rosenthal has gained considerable freedom during the

(Continued on page 34)



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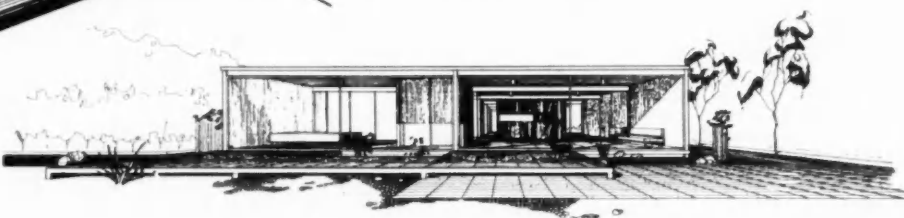
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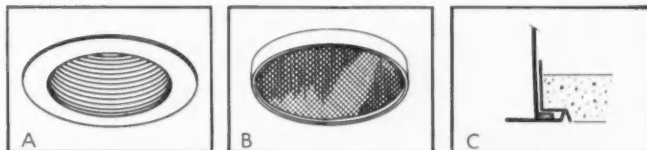
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PETER YATES

TWO ALBUMS BY JOHN CAGE—PART 2

Anton Webern and Erik Satie are the two composers who in the early part of the present century most thoroughly put off the musical convictions, ambitions, and absurdities of their esthetic environment. They were not experimental composers. They remained lyricists, content to make their way by freshened instinct from note to note. Both later developed the means, within their immediate experience, to write somewhat more largely. Among the billboards of their contemporaries they invited attention by no more than a small sign.

Nowadays the accustomed composer, still raising his billboards along the highways of traditional progress, is disturbed by the attention being paid these two makers of small signs. And he is inclined to remark, as is the habit of the advertiser, "There is something here. Let's go over and see what we can learn from these two modestly aggressive men."

Next thing you know, a new billboard is going up alongside the traditional highway, upon which are painted large, but no longer lyrically, what are presumed to be the techniques of Anton Webern and Erik Satie.

John Cage was among the first composers to recognize the authority of both Satie and Webern. He proclaimed this discovery to me in a letter written during the mid-1940's, with characteristic conviction, compartmentalization, and exclusion. He directed the exclusion against his former teacher Arnold Schoenberg, using language that would have brought, I am sure, a smile from Satie and a protest from Webern.

The letter began with a long survey of Satie, for my information. I was not unaware of Satie; I had already twice presented his *Socrate*. Then it went on: "As I see music there are four departments of it inviting thought and action: structure (which is the division into parts of a composition); form (which is morphology-content); method (which is note to note or instant to instant procedure); and material (which is actual sound and silence). Schoenberg's contribution is in the minor area of method. Satie's is in the major area of structure. So is Webern's; his pre-12 tone works are structured according to phraseology instead of harmony, as are Satie's, as are mine. Schoenberg still thinks as Beethoven but new-fangles it through new method. . . . Form is the area of music that anybody goes into freely: the 19th century error was to imitate Beethoven's form-feeling. . . . Satie and Webern are free and original in their form, besides being so in their structure. The method of Satie, which is frequently banal, is what disguises his riches and prevents people from taking him seriously. They, however, have misplaced their seriousness."

The proof of worth in this perhaps hastily written statement is not its absolute truth but what John Cage was able subsequently to make of it. The argument is both wrong and remarkably perceptive. The impatience in dismissing Schoenberg is scarcely relevant. A great part of the seeming incomprehension of Schoenberg among the more creative composers of the two latest generations is no more than a testimonial to his enormous presence: you have, for a while, to get him out of the way, as you do Beethoven, before you can look carefully at anybody else.

John Cage is not a lyrical composer but an experimental composer in the distinctively American experimental tradition that began with Charles Ives. In the previous article, speaking of his recorded album *Indeterminacy: new aspect of form in instrumental and electronic music* (issued by Folkways), I described John Cage as a philosopher of esthetic instances. A lyric is an esthetic instance, which, however large, is esthetically complete and finished. Nothing else need come after it. The music of Anton Webern is a succession of such lyrical events, each proceeding from the last in an almost stanzaic perfectness, as if the entire small body of his composition were a single lyric. In Cage's work the esthetic instances are being constantly combined, experimentally, towards new process, and the relevance of any single event is not, simply, what it is but what it may be.

One aspect of John Cage's work has been to direct our attention to the commonplace miracles which are happening everywhere around us, sounds, noises, comments, contradictions of

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expected happenings, which require us to open our attention and examine freshly what we have been taking in all the time.

A sunrise is of course a miracle. The amount of attention needed to experience in every nuance a sunrise—or, if you rise less early, a sunset—exceeds our capacity. Try sitting motionless and taking in, from top to bottom, from side to side, in tint and tinge, in the evanescence of enriching darkness, one entire passing of the sun above or below the horizon. You can't do it, neither can I. The purpose of esthetic definition, however applied, is to create a focus, a frame, a rhythm, to formalize an experience which, unformalized, would be beyond our capacity to receive.

Esthetic experience, accepting the formalization, dogmatizes the formalities. At that point, for many, the attention ceases. No argument can get it unstuck; the finality of experience at this sticking-point is its own defense.

When the Great Books organizations set out to convince people it was worth their while to read the Great Books, they set up rules by which the conversation about these books would be limited, each book by itself in its own context; then they reduced the context by instructing readers to read only some parts of the text; then to ensure compliance with these formalities they reissued the books in their own curtailed editions. In the same way nowadays the Great Performer reduces the Masterworks of Music, as they are inevitably called, to their most assimilable inessentials.

What began as experience, the miraculous rare opportunity, became taste, one's own and more easily satisfied, then education, which can be purchased, then appreciation, to be had by little effort, and winds up as a mass-production business. That is why I advise giving attention to the esthetic instances carefully worked out and strung together by John Cage, not to appreciate them—if you do that, you must first dislike them—but to sharpen experience by a miraculous rare opportunity.

This month I shall discuss the *25-Year Retrospective Concert of the Music of John Cage*, recorded at a Town Hall concert in New York, 1958, issued by George Avakian. The album includes extensive notes and descriptions of the methods used to create each composition, with examples of the systems of notation. Unless otherwise indicated, the quotations hereafter are from these notes.

Consider first a work for mezzo-soprano, *The Wonderful Widow of Eighteen Springs*, text from page 556 of James Joyce's *Finnegan's Wake*. "The voice-production is without vibrato, as in folk-singing. In order to employ a low and comfortable range, the singer is permitted to make any transpositions of the written notes.

"The pianist closes a grand piano completely (strings and keyboard). The underpart of the piano structure is notated on the first space of the staff, the front part of the keyboard-lid on the second space, the back and upper part of the keyboard-lid on the third space, the piano top on the fourth space. These are played with fingers and, where the notes are x's, with the knuckles. Right and left hands are distinguished.

"No rhythmic structure or method was consciously employed in this composition. All the elements of the melodic line and its percussive accompaniment followed from impressions received from the text."

At first thought we may grant that criticism the French composer Pierre Boulez made to me of Cage's music. Striking the wooden underside of the keyboard, he said: "It is not in the musical continuum."

In a persuasive lecture about his method of serial composing Boulez explained that he had gone beyond the Schoenberg method of the tone-row by giving equal relevance within the row to these four amplitudes, pitch, loudness, timbre, and duration. (If this blurs the fine points of Boulez's argument, it doesn't really matter, because a theory that exists will enforce itself by its existence, and one that doesn't will have to be continually re-explained.) Boulez did not mention that John Cage had defined sound in terms of these four amplitudes as early as 1938, when he composed his *Construction in Metal*, for percussion.

The argument is of course academic: to redefine these amplitudes as absolute characteristics of a particular series of notes and so expand them serially is no more than to change the formal terms, to take them a little farther afield from the tradition. Boulez is like the diatonic composer who becomes aware of quarter-tones. Cage questions the need of any tones, so long as

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there are sounds. We may alter the nature of the sound, as by adding unprecedented instruments; we may alter the application of the sound or its amplitudes to the formalities of the music, as has happened often enough in the past; or we may alter the formalities, as occurs with every change of style. In fact we are only inventing examples of what can be done.

Schoenberg said to me of Cage: "He is not a composer, but an inventor—of genius." As Cage applies these new esthetic possibilities, he compels the listener to question or alter or recombine the connective processes by which he has received esthetic experience in music and so to question or hold in suspension his accustomed modes of thought.

Or as a friend said, after hearing a part of Cage's *Indeterminacy*: "I didn't particularly like what I was hearing, but when it was over I understood there was only one other thing I could do about it: I had been compelled to listen with an open mind. You could, undoubtedly, listen to it with a closed mind, but then you wouldn't hear it."

Boulez, a doctrinaire of the French academic species, having already disowned Schoenberg, wrote Cage a letter breaking off their acquaintance. By doing so he announced the closing of his mind.

*The Wonderful Widow* was composed in 1942. During 1943 Cage composed the *Quartet for Tom-toms*: "The hypnotic-muted effect . . . depends on two factors—on playing center and edge

with the fingers, less frequently with wire brush or tympani stick, and on the rhythmic length of the structure, the parts of which are expressed sometimes by sound and sometimes by silence."

In 1943 he wrote also the duo for voice and piano, *She Is Asleep*, "a vocalise with the piano prepared by inserting four pieces of rubber between the strings of four high piano keys." (The short, hard high strings eliminate unwanted vibration.) "The singer, freely vocalizing the melodic line, is encouraged to employ unconventional methods of voice production." In the recorded performance the method chosen by the singer resembles the altered voice of primitive art-singing.

Damping the piano strings for the vocalise may have led Cage to the prepared piano. To prepare a piano, "mutes of various materials are placed between the strings of the keys used, thus effecting transformations of the piano sounds with respect to all of their characteristics." (A kit of equipment with instructions is provided purchasers of the score.) "All the factors of the piano preparation were found experimentally. They represent a choice determined by taste rather than reasoned relations. In most cases, the preparation preceded a composition. . . . The result is a gamut of sounds moving from lower to higher octaves without the correspondences of pitch characteristic of scales and modes. These sounds are of different timbres and of a decibel range comparable to that of the harpsichord. In effect, the prepared piano is a percussion ensemble under the control of a single player. Where mutes are placed only between the 2nd and 3rd strings, two different sounds are available, one produced with the soft pedal (which eliminates the effect of the third string), the other without it. Certain piano preparations bring about a combination of sounds, though only a single key is played"—for example a bolt with a washer, where the washer gives a gong resonance distinct from that of the string muted by the bolt. Cage includes in these compositions the normal tones of undamped strings, as he wishes. Unlike the greater part of his maturer music, these sonatas and interludes for prepared piano are meant to be performed as written.

I have presented John Cage in two performances of the sonatas and interludes for prepared piano. The first time we divided the evening between his music and a group of ancient Japanese melodies for shakuhachi, played by the master Tamada. Before the second performance Cage wrote me, in the letter from which I have already quoted, this brief credo: "I find 'programs' no longer useful, because they stand in the way of the proper use of music which is to quiet and concentrate the mind, and not to giddify it with entertainment, no matter how intellectual. In relation to the shakuhachi music, which is so marvelous, there must be no other music. It is against proper being, unnatural. The same is true of these pieces of mine, and I say it in no spirit of self-praise but simply in simple thought about what music is and does. I am not interested in success but simply in music. . . ."

Cage has traveled too fast to wait for praise, and this separates him spiritually from many of the younger composers who have learned from him. Cage is concerned with himself because through himself he generates ideas. He does not consider these ideas his, in the possessive sense of originality, or in the competitive proprietorship of the younger European composers he has aroused. He is prophetically burdened by the need to act out thought. He is fully equipped as a teacher to dispense the traditional knowledge—I learned this from a young composer who had studied conventional theory with him—and as critical analyst—read his book about the music of Virgil Thomson—being in this way like his master Schoenberg. He is far broader in taste and judgment than his tactical exclusions, at different periods, might cause one to believe.

Throughout his career Cage has labored to free music from all fixed, precedented principles, substituting for these other principles of unlike effect, as his use of ordinary piano notation for the prepared piano shows the key to strike but not the pitch or sound that will result. The prepared piano led him to discover "gamuts of tones, intervals and aggregates used in the String Quartet and subsequent pieces."

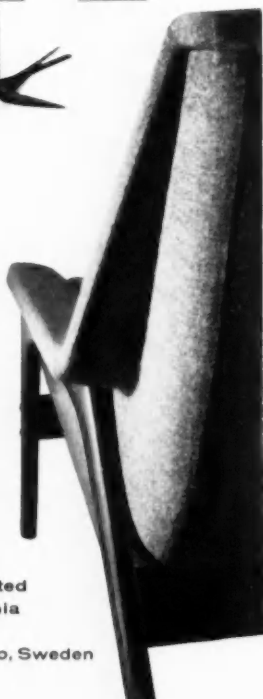
Cage was experimental from first beginnings. His *Six Short Inventions* (1933) deal with "the problem of keeping the repetitions of the 25 individual tones within a two-octave span as far apart as possible," no voice introducing a repetition until all

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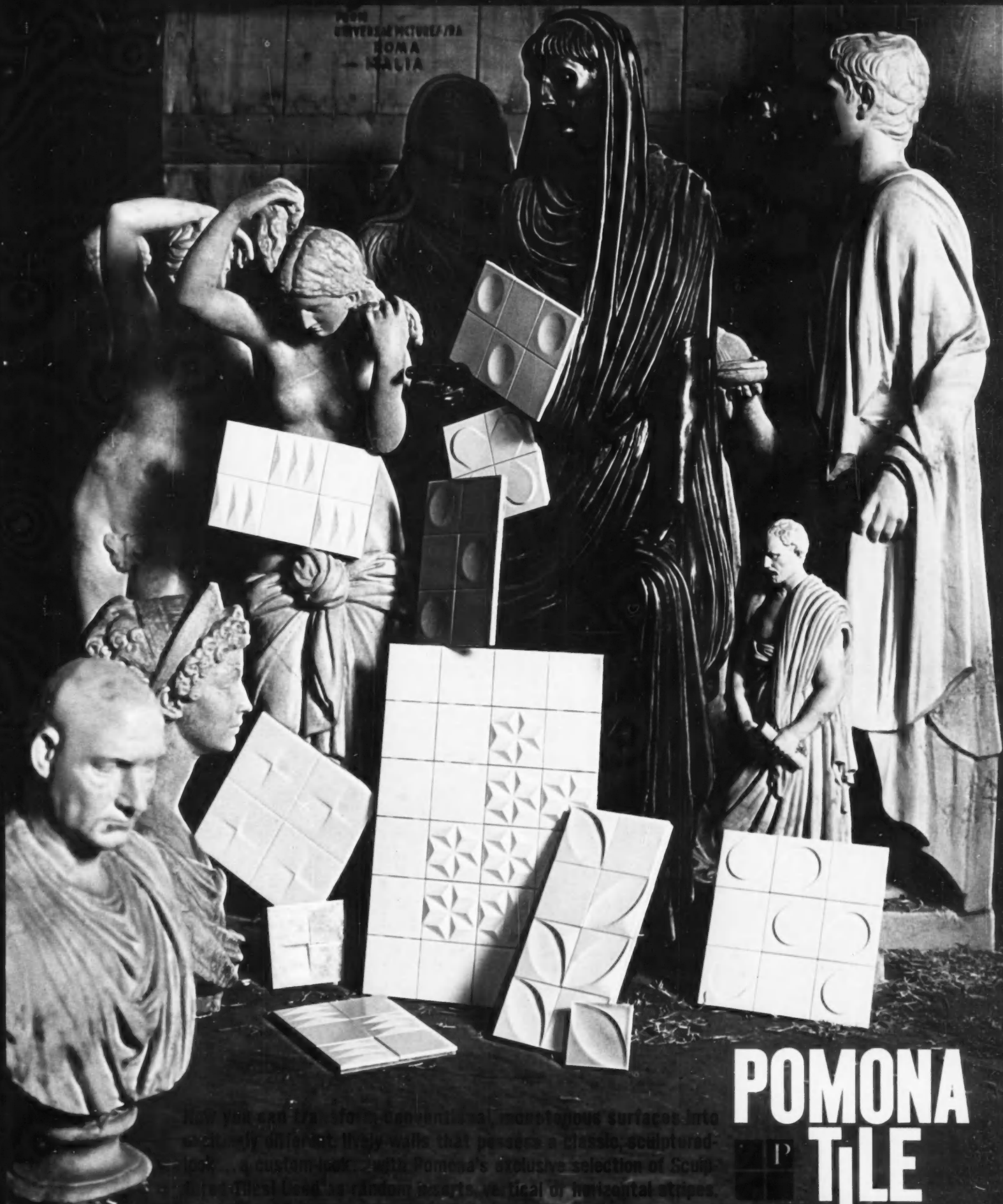
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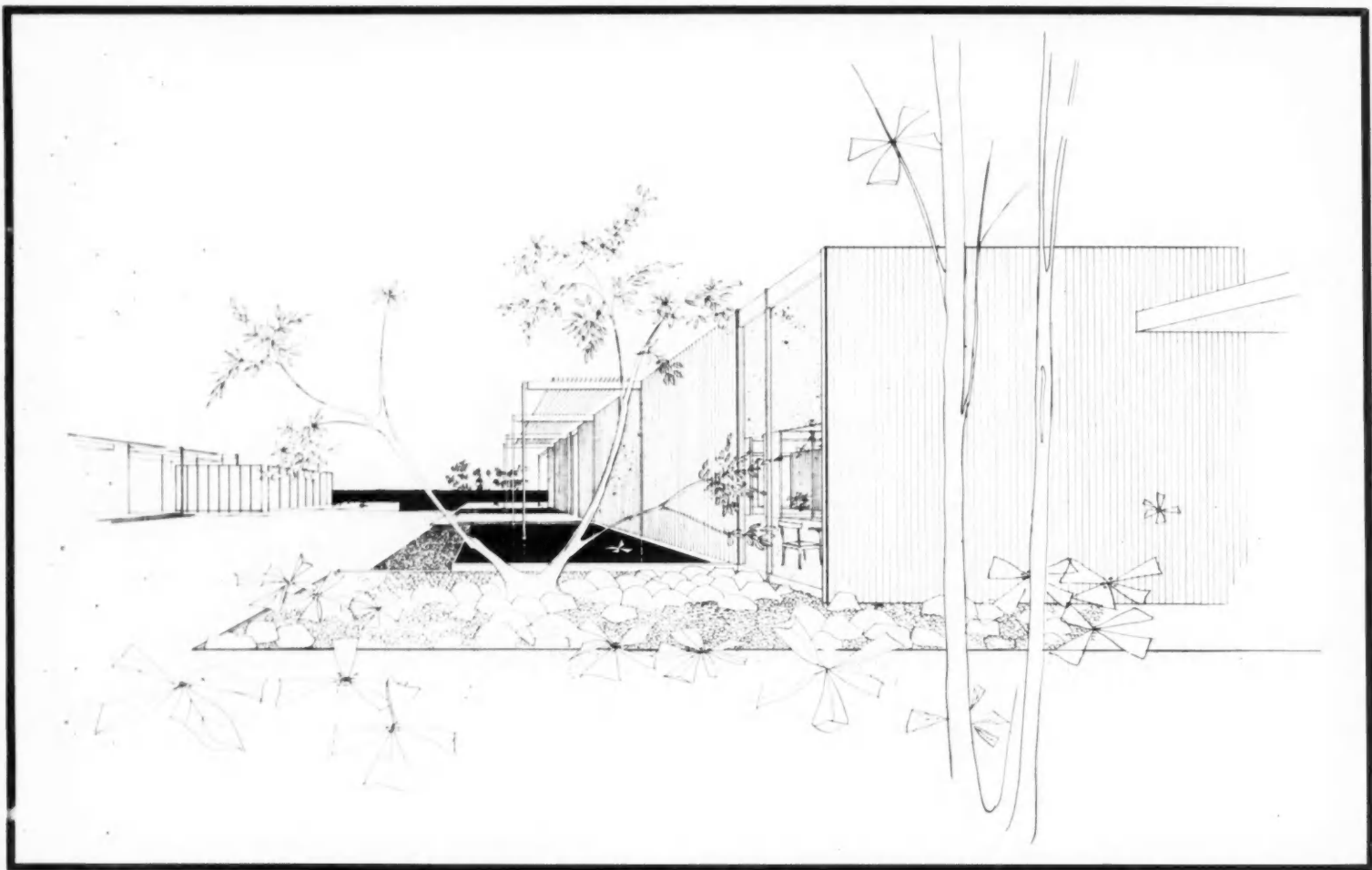


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History is not simply the mirror of the past: it often influences our actions in the present and to a large extent governs our behavior in the future. The world of yesterday is reflected in the virgin mind of the schoolchild or student by his textbooks, and what he learns from them will be projected by him onto the world of tomorrow.

The teachings of ancient or modern history undoubtedly help to mould men's minds and deeds, but their effect is usually confined to mental attitudes. They provide no spur to direct action but leave in the subconscious mind a strange amalgam of sympathy or aversion. They are not decisive in producing definite immediate action.

Our object is to calm men's minds and ensure peace in our time, which means that our activities should be essentially focused on contemporary history.

Not, of course, that we shall ignore ancient or modern history altogether. The past was the time when most of us were strong and powerful, with the world at our feet.

But in reviewing history we must set ourselves firmly against basking in past glory, using it as an excuse for living in a dream-world of yesterday, and justifying our inactivity, divisions and vanity, as we squander the noble heritage of our ancestors, by flaunting the golden pages written. What we need is just sufficient history to avoid becoming exclusively concerned with the present but not too much to lull us to sleep in a Capuan paradise of the past.

Passions are still hot so far as contemporary history is concerned and many of the actors are still living. The wounds have not yet healed, and conflicts of interests are still unresolved.

World developments since 1914 have moved apace. All we need do is to consider the facts, look at the map and study the statistics. The post-1914 period has been marked by the accession of a whole host of States to independence. The influence of the West—or perhaps, to be more exact, one should say of Europe in particular (and, still more precisely, its military and political presence) has undergone an amazing decline. The contraction of this Balzacian "wild ass's skin" sums up the whole drama of modern times.

In what way can the history of these developments promote better appreciation of mutual values? It is history in the making, and, in some cases, still to make. To complete it, two lines of action would today have to be contemplated, designed for different sets of school-children or students and based on two equally vital principles.

The first is oblivion. Our memories may be a millstone round our necks. It is good now

and then to deposit them in the cloakroom of modern times and let them stay there.

The new conception of history should be based on total oblivion of one particular aspect of the past. People must forget that they once occupied a country and had to govern it by main force, that they exploited it economically, humiliated it by all sorts of legal or devious discriminatory practices, disparaged its culture and language and cast scorn on its institutions and faith; and that it emerges from these passages in its history still bruised in body and still suffering from the indignities to its pride and self-respect. With all this over and done with, there must be no hankering after the past: the only possible reconquest is a cultural one.

What must be consigned to oblivion, above all, is the concept of racial superiority, and those red, green and blue patches which pictorially symbolized servitude or domination, the relationship of the lord to his serfs or slaves, on yesterday's atlases and wall maps. I do not think I am being over-paradoxical in stressing this seemingly trivial aspect; but who can say how much harm has been done to the world by this insidious mania—a symbol of possession for the one and a badge of shame for the other? Our eyes must be trained to see with a new vision. The rising generations, having unlearned hatred or contempt, will extend the hand of friendship. Certain considerations should be singled out for special study. In particular, action must be taken to combat discrimination. This new word for a very old phenomenon still awaits precise definition. In essence, it covers inequality of treatment based on prejudice, the prejudice often being nothing more than a philosophical cloak masking concrete material interests. Anything done in this field will have a very beneficial effect.

I have referred to action among school-children and students. This must be supplemented by another form of action relating to another generation entirely. Here we come up against a new problem: that of the discontinuity of history.

The world does not stay still between the time we leave the schoolroom or the university and the time when we play an active part in life. The fact that the historical process has quickened is now generally accepted. By a sort of process of osmosis or contagion which can be traced back to modern techniques, history has been sharing in the effects of the acceleration of means of communication and information media.

Modern man has little time for reflection and the statesman is no exception to the rule. It needs a prodigious effort of energy and will on his part to turn inwards and make a calm, careful and objective study of the facts. It

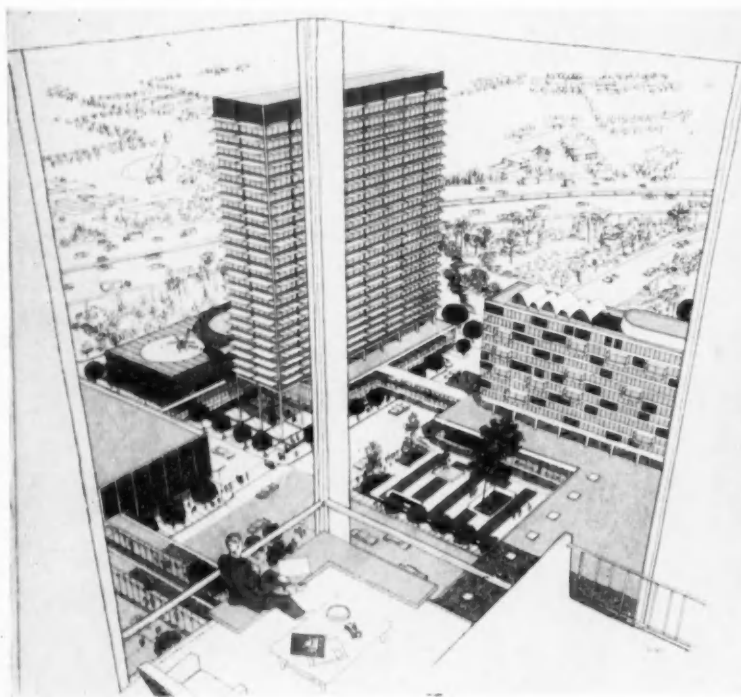
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## COMMERCIAL DEVELOPMENT

THE NEW CULLEN CENTER FOR HOUSTON, TEXAS. BY WELTON BECKET AND ASSOCIATES, ARCHITECTS

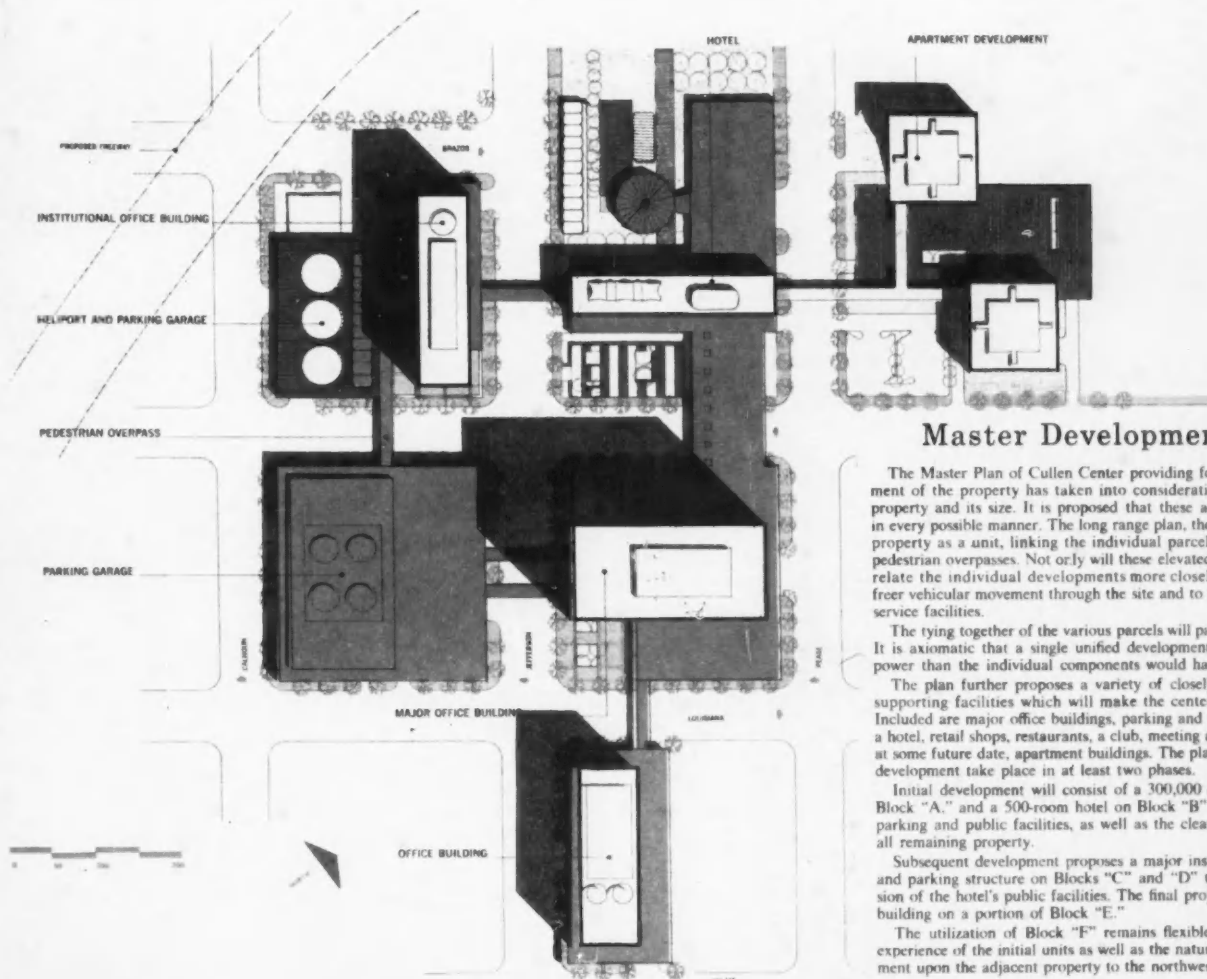
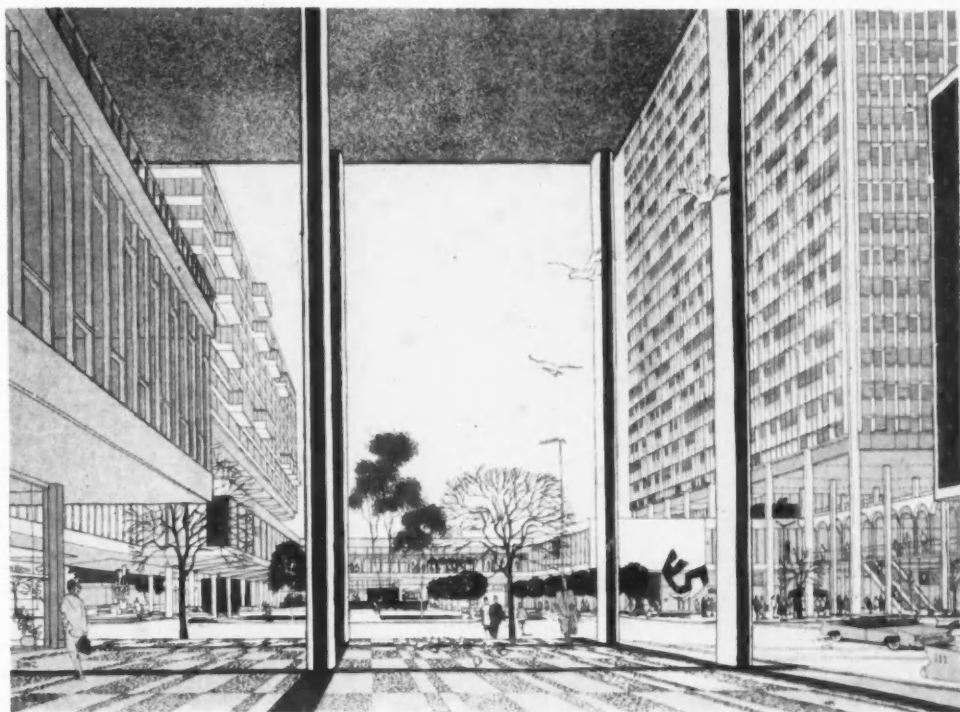


LOOKING AT A MODEL OF THE NEW CENTER SUPERIMPOSED ON THE HOUSTON SKYLINE



Occupying a five and one-half block, twelve-acre area in the downtown section, the site of the new Cullen Center represents the largest single undeveloped holding of land in the city of Houston. The entire property has been treated as a unit. The plan links the individual structures with completely air-conditioned pedestrian malls and overpasses on the second level, thus permitting greater freedom of vehicular traffic throughout the site while allowing pedestrians to move about more pleasantly and safely.

The Center will be located in the southwest portion of the central business district, at the crossroads of major loop freeways. It will have four major levels: subsurface, used for parking and mechanical equipment; street, used for lobbies, parking and service entrances, drive-in facilities, shops, plaza, and landscaped areas; a second level, used for pedestrian-oriented facilities such as shops, displays, galleries, restaurants; and the space above into which will rise the various towers containing hotel rooms and offices. The project has been master planned to provide a guide for orderly development over a number of years.



### Master Development Plan

The Master Plan of Cullen Center providing for incremental development of the property has taken into consideration the location of the property and its size. It is proposed that these advantages be exploited in every possible manner. The long range plan, therefore, treats the entire property as a unit, linking the individual parcels with air conditioned pedestrian overpasses. Not only will these elevated, all-weather walkways relate the individual developments more closely, but will also permit freer vehicular movement through the site and to the various storage and service facilities.

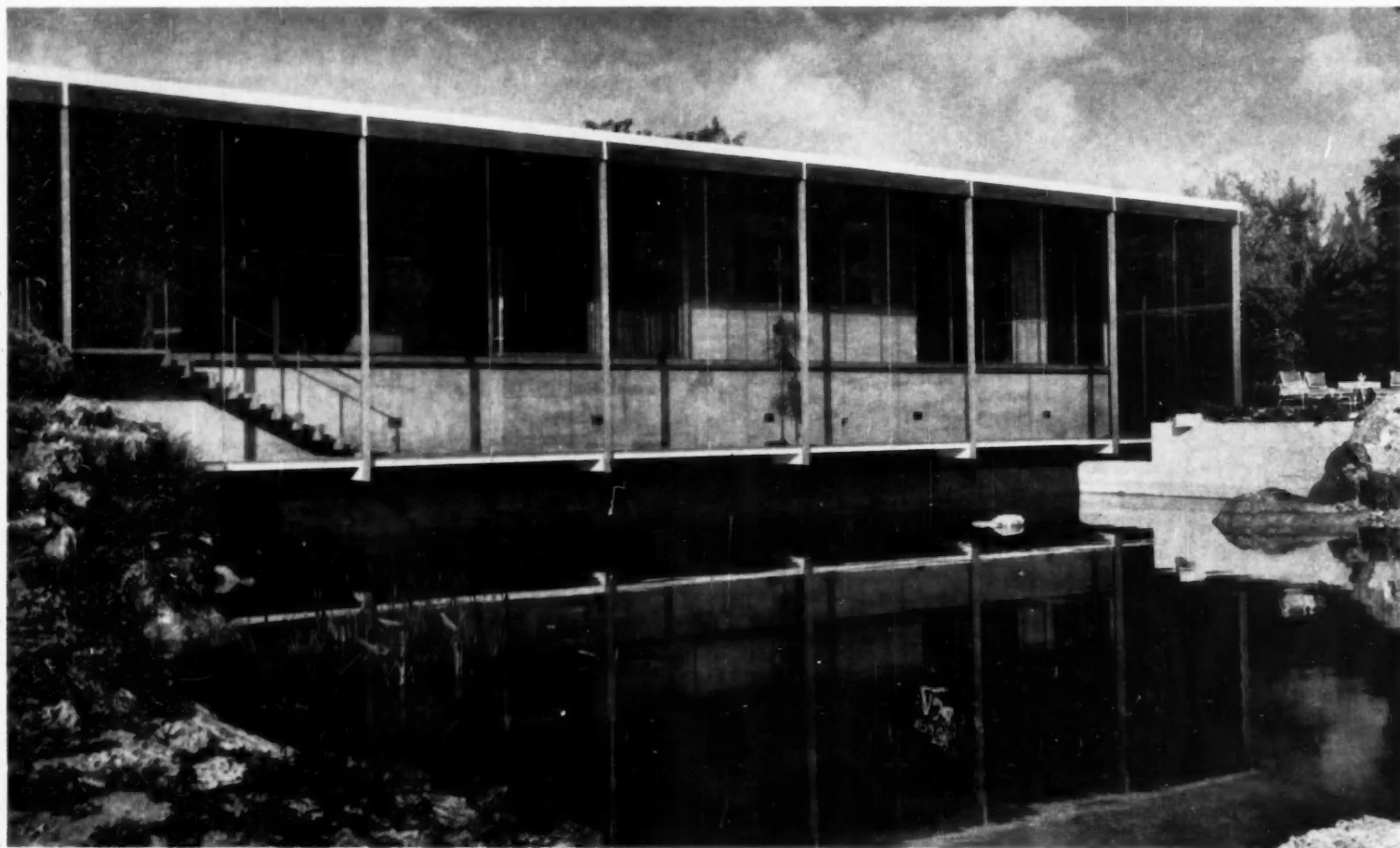
The tying together of the various parcels will pay substantial dividends. It is axiomatic that a single unified development has a greater drawing power than the individual components would have if separated.

The plan further proposes a variety of closely related and mutually supporting facilities which will make the center a self-contained unit. Included are major office buildings, parking and transportation facilities, a hotel, retail shops, restaurants, a club, meeting and banquet rooms and, at some future date, apartment buildings. The plan suggests that ultimate development take place in at least two phases.

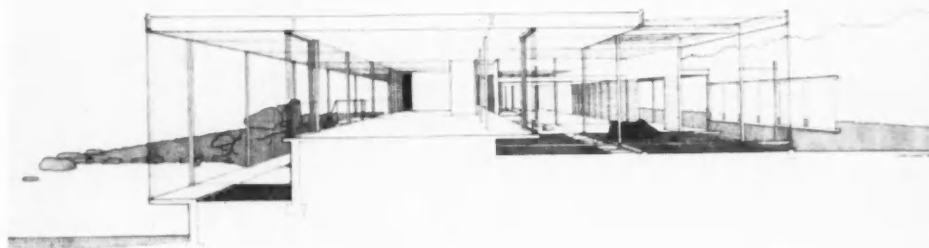
Initial development will consist of a 300,000 sq. ft. office building on Block "A," and a 500-room hotel on Block "B" together with necessary parking and public facilities, as well as the clearing and landscaping of all remaining property.

Subsequent development proposes a major institutional office building and parking structure on Blocks "C" and "D" together with an expansion of the hotel's public facilities. The final project consists of an office building on a portion of Block "E."

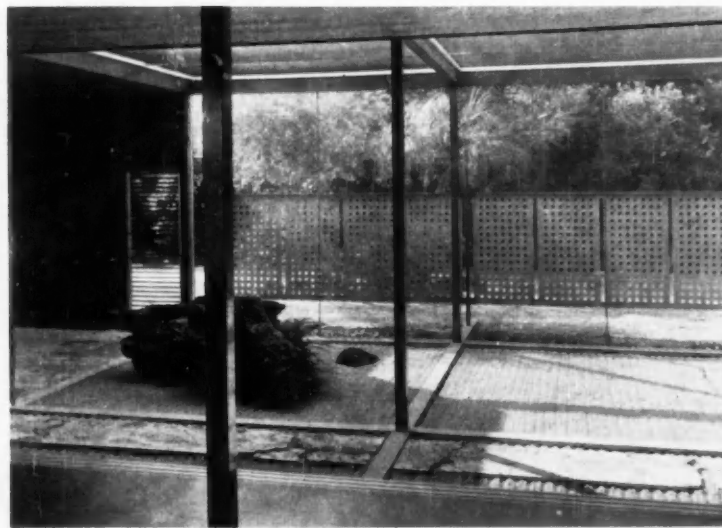
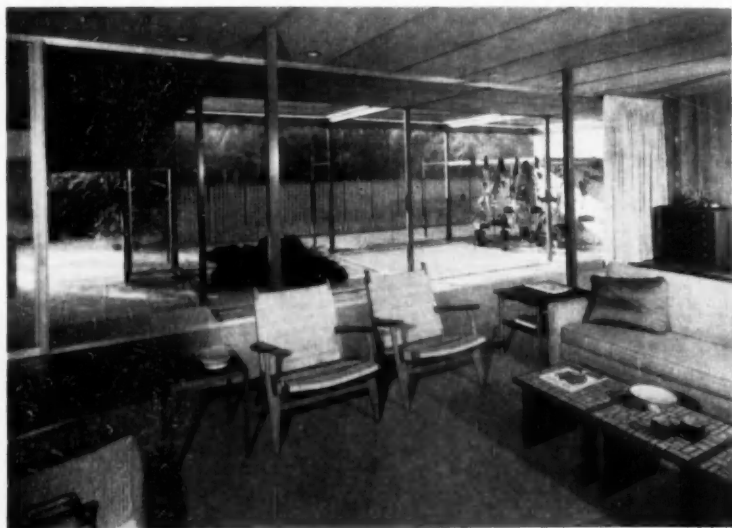
The utilization of Block "F" remains flexible and should reflect the experience of the initial units as well as the nature of any major development upon the adjacent property to the northwest.

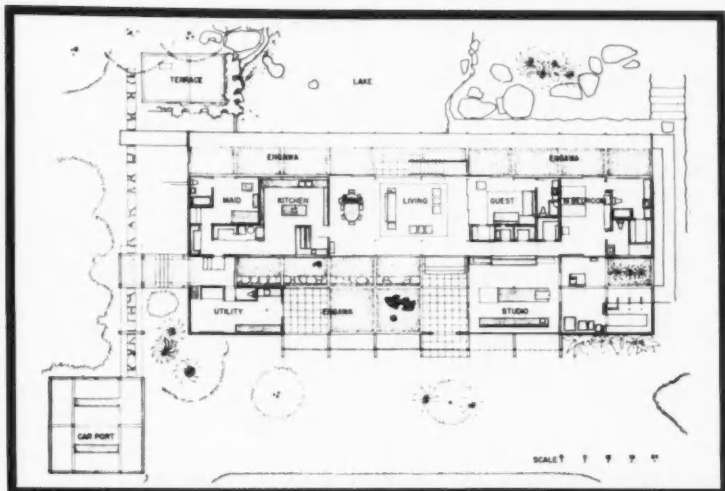


HOUSE IN FLORIDA



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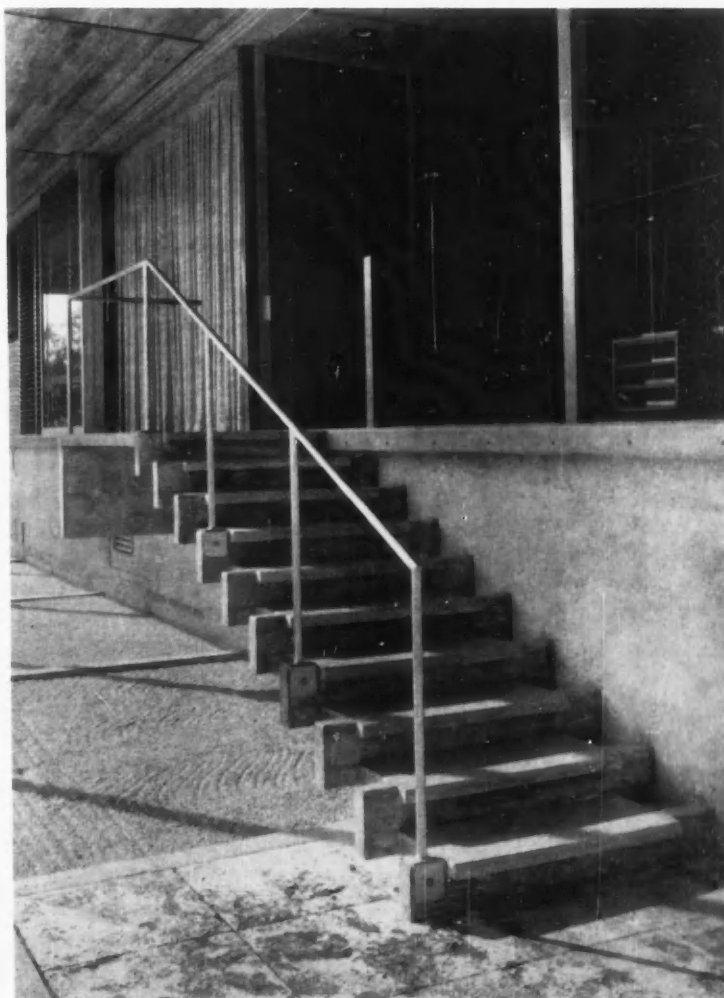




The owners desired the house to be open to cooling by the slightest easterly breezes and open for full awareness of a small lake to the east and of woods to the west. Being an active couple with grown children and special interests they needed space for entertaining, for occasional guests, for growing tropical flowers, and a complete ceramic and art studio.

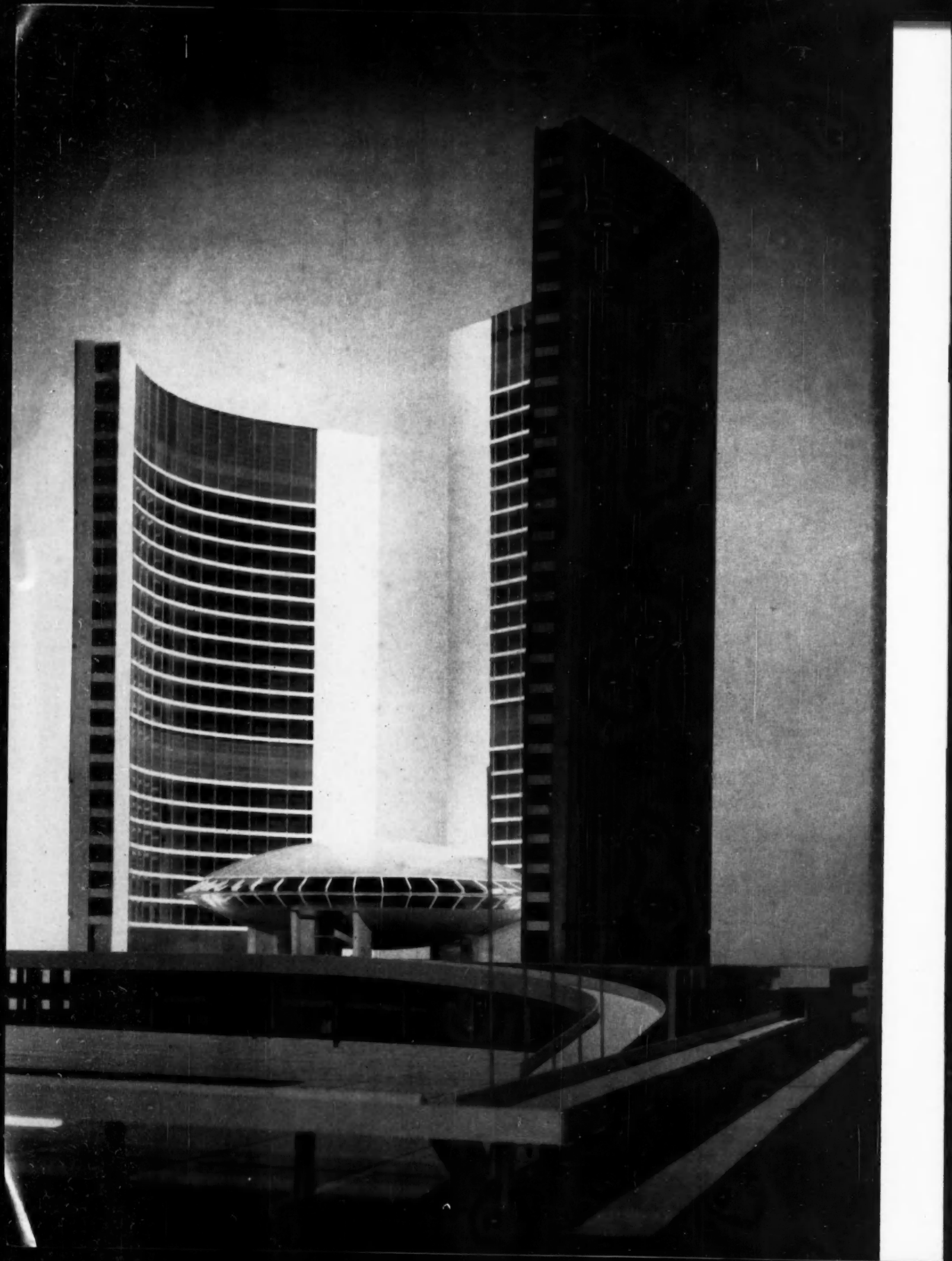
From lake shore to building line an inlet was dredged. Large rocks from the fill were piled on either side. Levels were established which were to be the most important part of the design concept, and plan modules were chosen: three feet north and south to accommodate jalousie openings, four feet east and west, the minimum comfortable passage width. An economical structural system helped achieve generous overhang areas between glass and insect screens. These areas provide important living spaces with twelve-foot overhang protection. Long walls of sliding glass allow the use of the main living and dining area as a pavilion completely open east and west. When easterly winds become strong, the east wall may be closed while the

*(Continued on page 34)*



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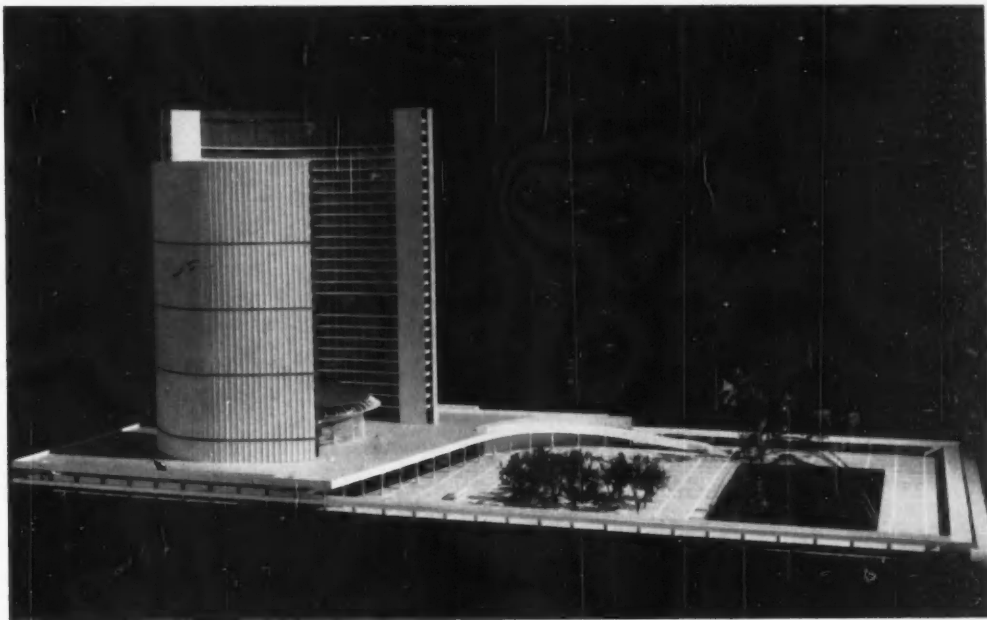






The citizens of Toronto, Canada, initiated a project to build a new City Hall in the Civic Square. "The City Hall and Square should be a most important element in the life of the city, a symbol of Toronto, a source of pride and pleasure to its citizens to be used and enjoyed by them." To that end, an open competition was arranged for architects in all countries. An eminent jury selected eight finalists from 520 entries, and the winning design chosen was that of Viljo Revell of Finland and his associates, Heikki Castren, Bengt Lundsten and Seppo Valjus; the project to be carried out in Toronto in partnership with Parkin Associates, architects and engineers.

There are three main elements in the design of the City Hall; the Podium, the Nucleus and the Towers. A fourth element may be termed the Civic Square. The Podium comprises the first and second floors and the basement. The Nucleus comprises the Council Chamber and its ancillaries. The Towers comprise the general office floors. The Civic Square is that portion of the site forming a great forecourt to the City Hall. It is connected to the building by a colonnade surrounding the square on all sides, and includes a reflecting pool which could be used as a skating rink. On top of the colonnade there is a



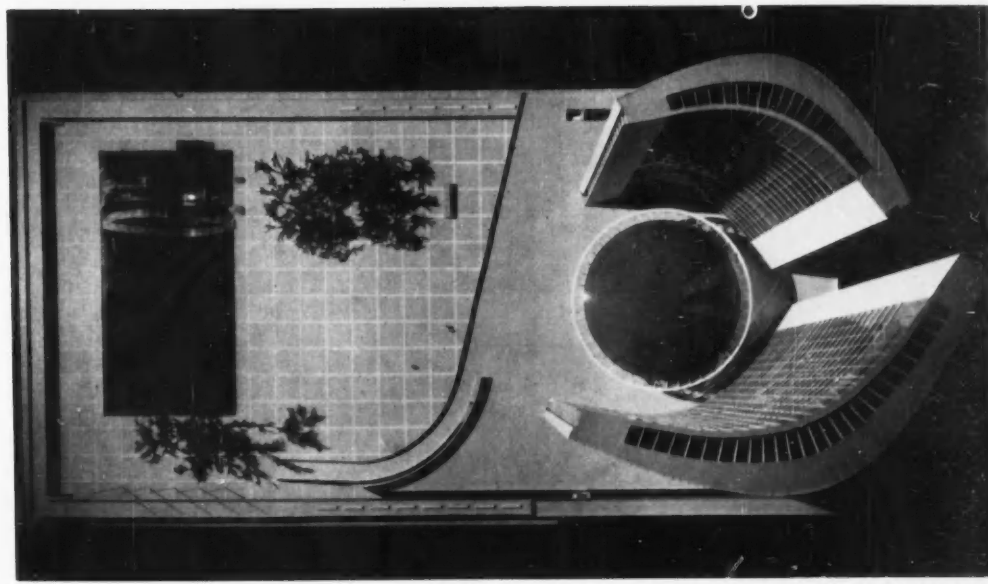
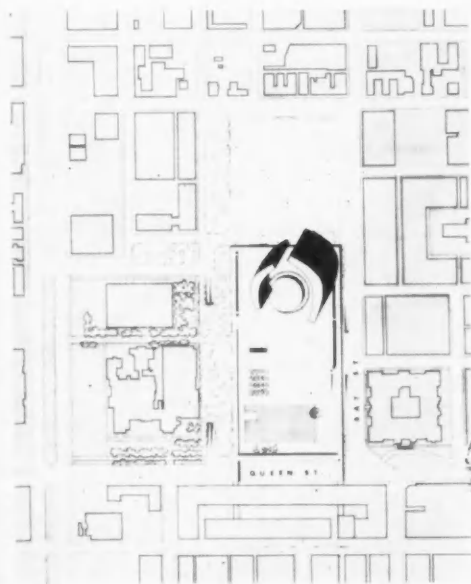
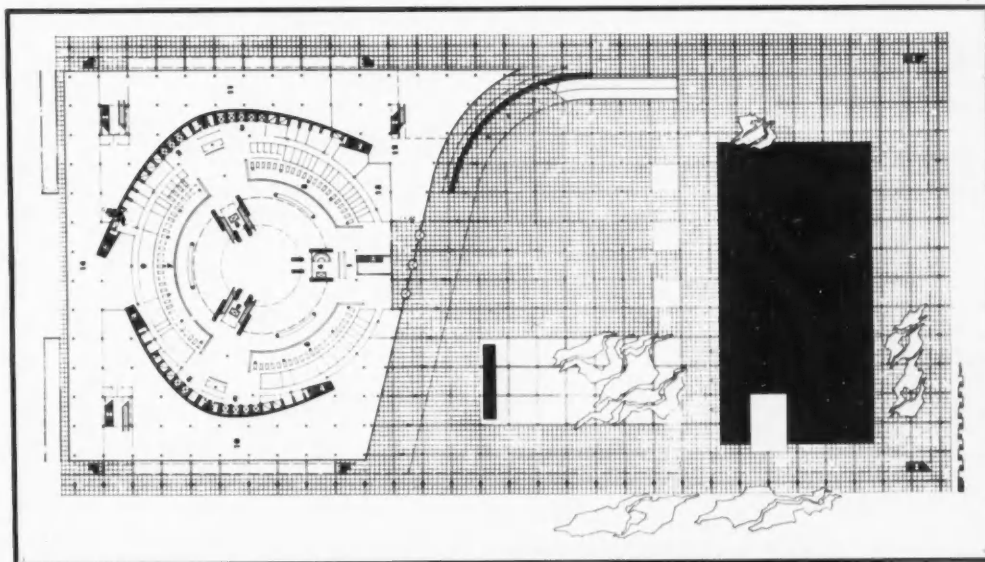
# NEW CITY HALL AND SQUARE. A PROJECT FOR TORONTO, CANADA. BY VILJO REVELL, ARCHITECT

HEIKKI CASTREN, BENGT LUNDSTEN AND SEPPO VALJUS, ASSOCIATES

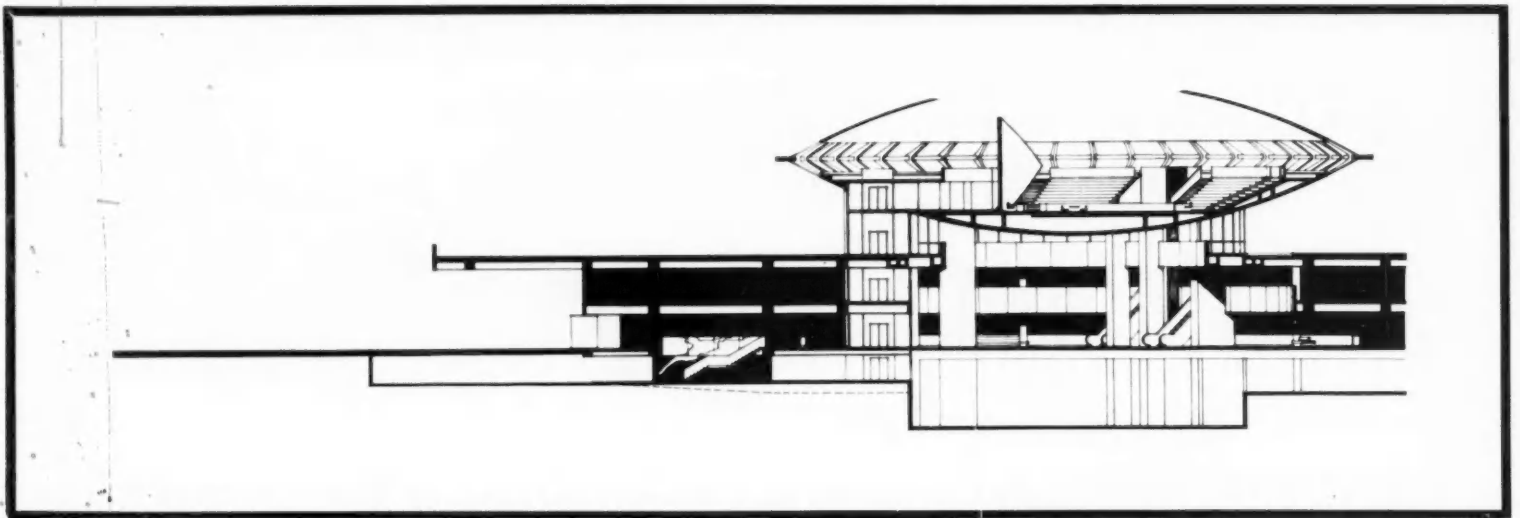
walkway. At some future date this could be extended to connect at second floor level into a building on the south side. The first floor of the Podium is the public access area or that central part of the city hall immediately accessible to the public from the street or square. At the front of the building a downtown reference library is located. Adjacent to the public access area, but with direct access from the street, the Registry and Land Titles offices are planned.

The second floor of the Podium includes the government areas, divided between City and Metropolitan departments. The offices of the Mayor and Metropolitan Chairman are in the center of the building overlooking the Civic Square, with Board of Control and Metropolitan Executive Committee offices adjacent on either side. The Basement is planned to provide parking and the building will be serviced by ramps down from street level.

The general office floors for City and Metropolitan Departments are in the Towers. The east Tower accommodates 21 office floors; the west Tower 16. There are technical floors at the top



PHOTOGRAPHS BY MAX FLEET

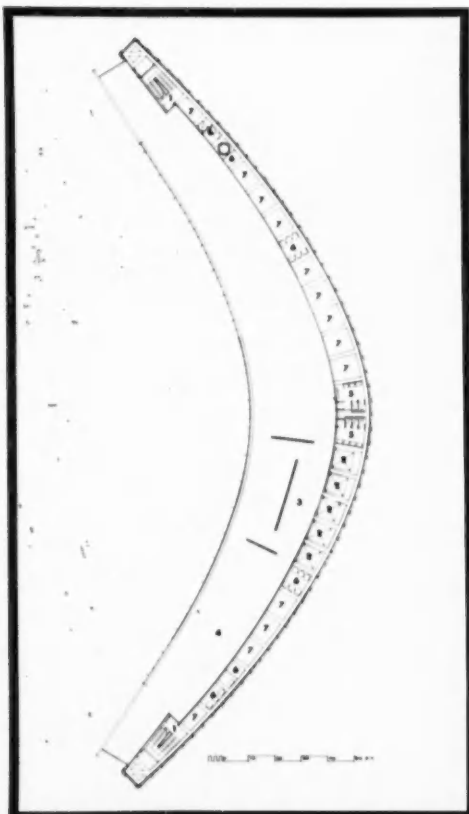
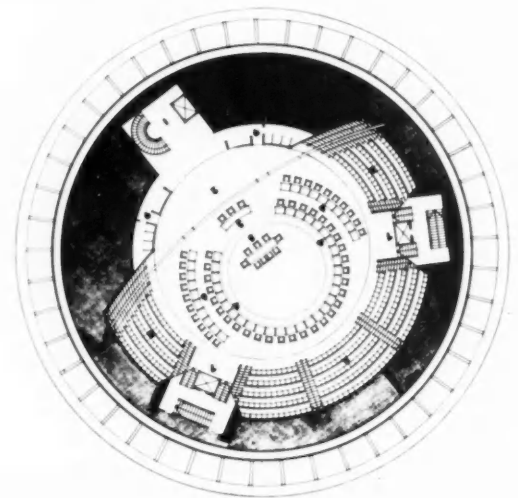


of each Tower and intermediately in each Tower. In the higher Tower, above the top technical floor, there is an observation deck, and in the lower Tower, the cooling plant. The Towers, like all structural elements of the building, are of reinforced concrete construction. The curved walls on the east and west sides of the Towers are faced externally with big precast elements of fine finish, shaped to provide architectural form and scale in daylight and by floodlighting.

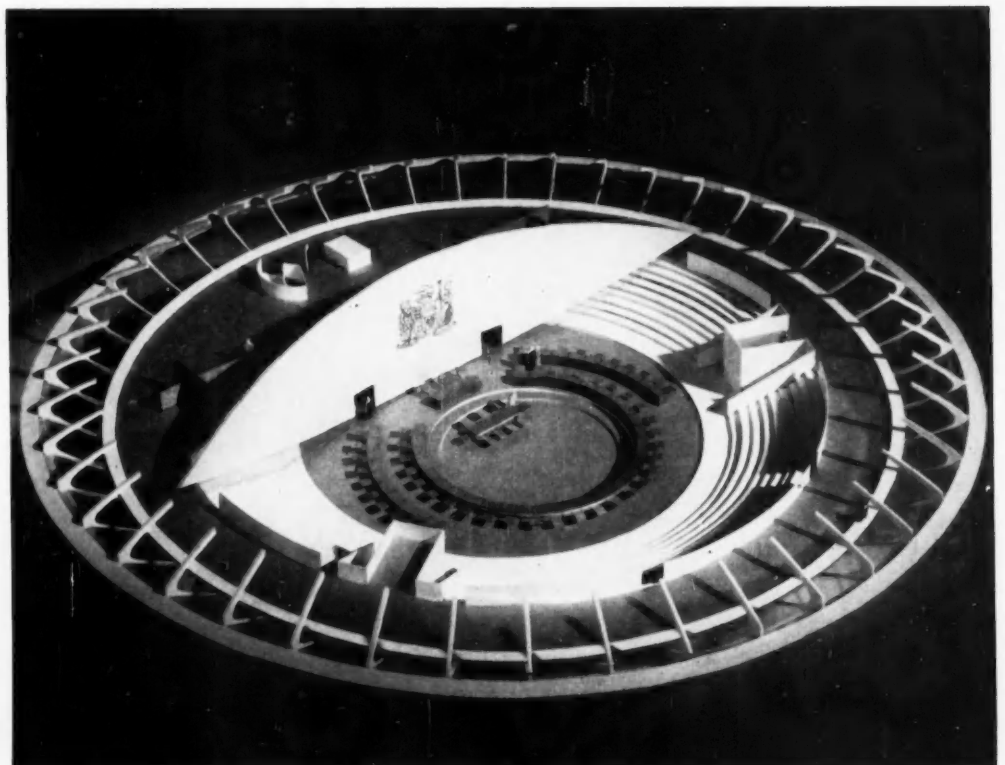
Since the Nucleus is elevated above the Podium roof level, it has been possible to provide a circular glass wall giving shaded daylight to the whole adjoining area below. The circular glass wall affords an opportunity for the public to see into the main foyer of the City Hall from the Podium roof. Of the three stair and elevator towers leading up to the Nucleus, the one nearest the front of the building is essentially for the use of elected representatives and city officials and the other two are for the public.

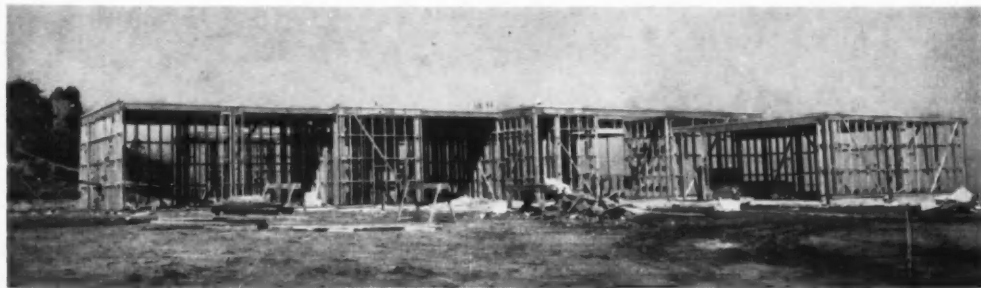
(Continued on page 34)

#### NEW CITY HALL, TORONTO

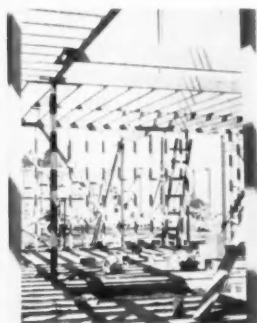
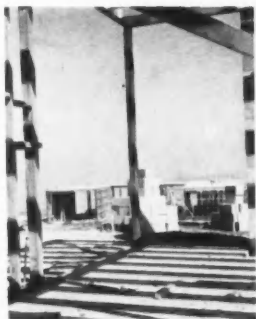


LEFT: EAST TOWER. TYPICAL UPPER OFFICE FLOOR





A TRIAD BY KILLINGSWORTH, BRADY AND SMITH, ARCHITECTS



Construction is proceeding at a rapid pace on all three houses of the Case Study House Triad. House "A" is completely framed and roofed. Steel columns for seismic loads are in place for Houses "B" and "C" and framing has started. The rapid progress has been due to the use of wood framing material as specified through the West Coast Lumbermen's Association. This speed should continue as the wood skin is applied on all three houses. House "A" will receive its resawn, T & G, butt joint, redwood vertical boarding as soon as the wiring is complete. The Harold Jones Company Luan Panels will follow the framing on House "B." This has been shaped in a  $\frac{3}{8}$ " channel joint at 4" centers. The panels have been cut to 10'-0" and 11'-0" lengths to conform to the 10'-0" ceilings. House "C" will receive its Douglas Fir texture 1-11 panels at about the same time as House "B" with its covering.

The wiring being installed in all houses has been adapted to the latest in the Lightolier fixture line. Most of these will be flush recessed incandescent fixtures with pin point spots providing strategic light at featured areas. The exterior lighting will be flexible through the use of the Lightolier garden lights.

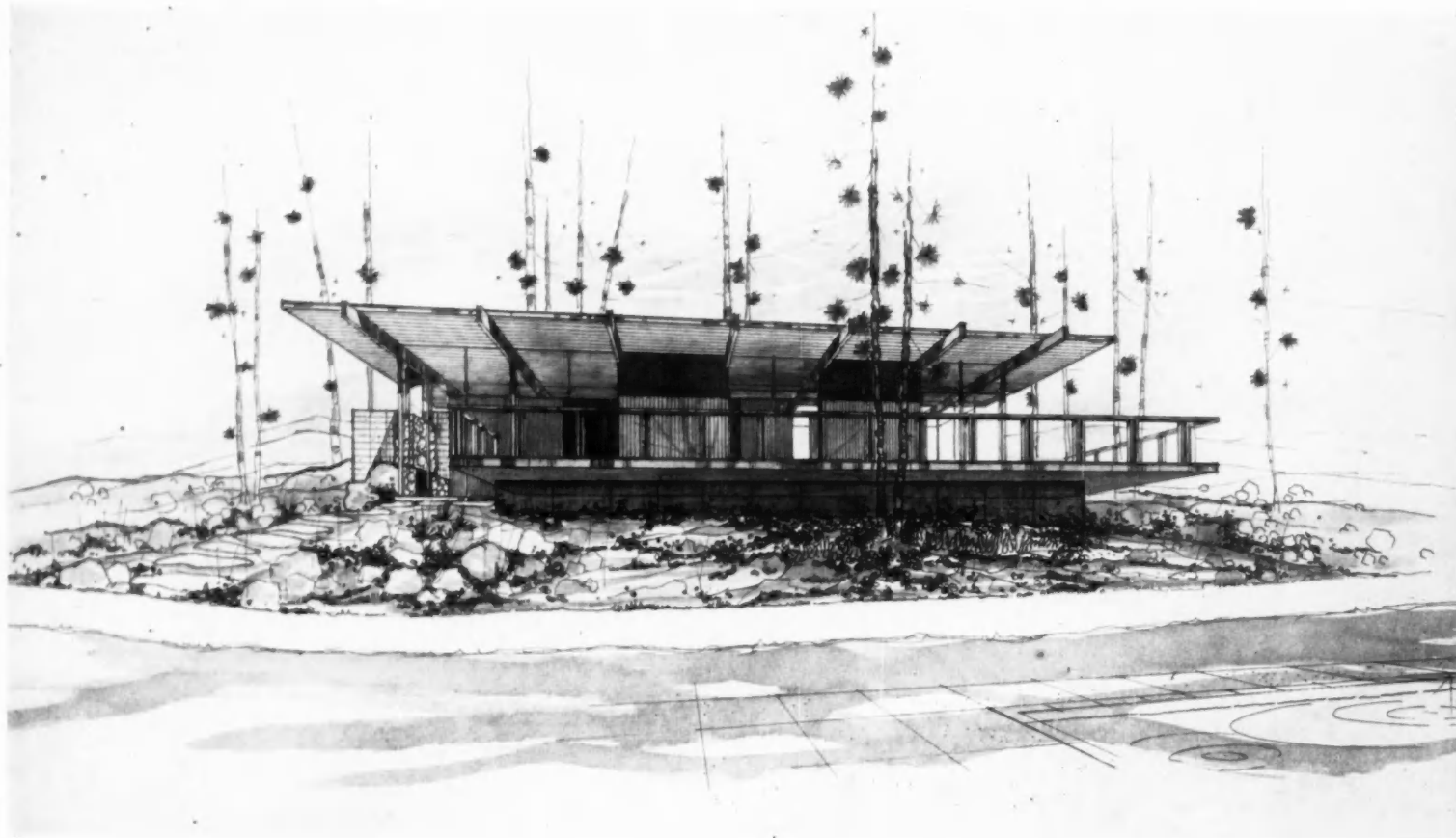
Landscaping plans are being developed as the houses are framed. In this way it is possible to obtain a more accurate expression of the exterior space to be furnished by the planting. Large masses of brilliant color with annuals and

*(Continued on page 34)*

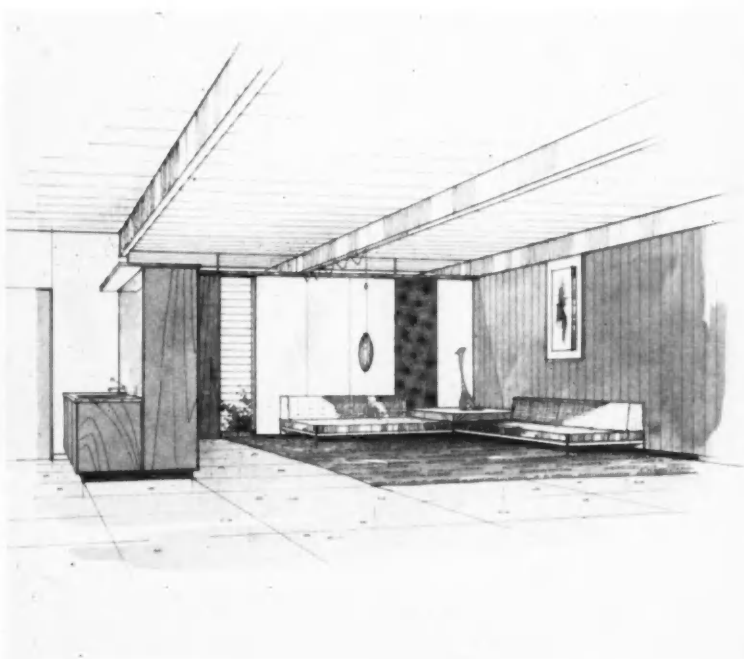
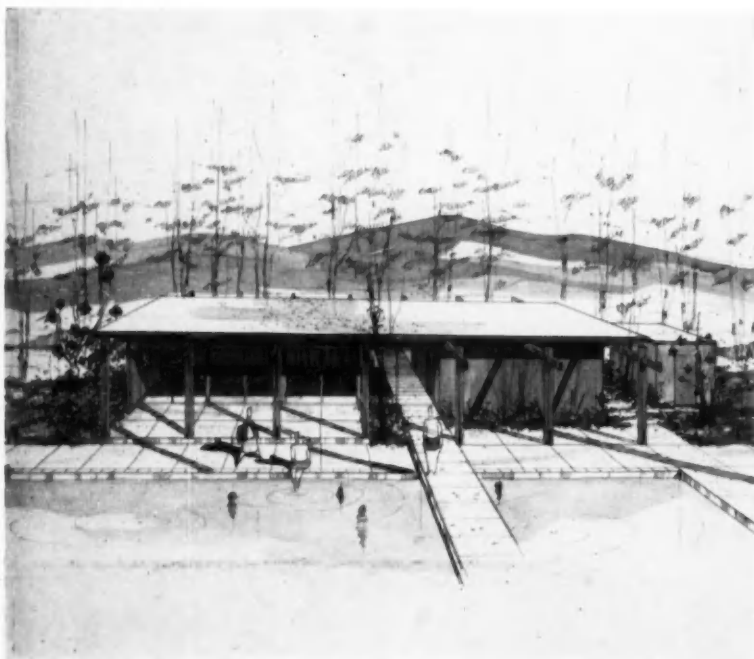
#### PROGRESS REPORT ON THE NEW CASE STUDY HOUSES FOR ARTS AND ARCHITECTURE



PHOTOGRAPHS BY CHARLES SCHNEIDER



MOUNTAIN CLUB BY OTTO J. KORVER, ARCHITECT

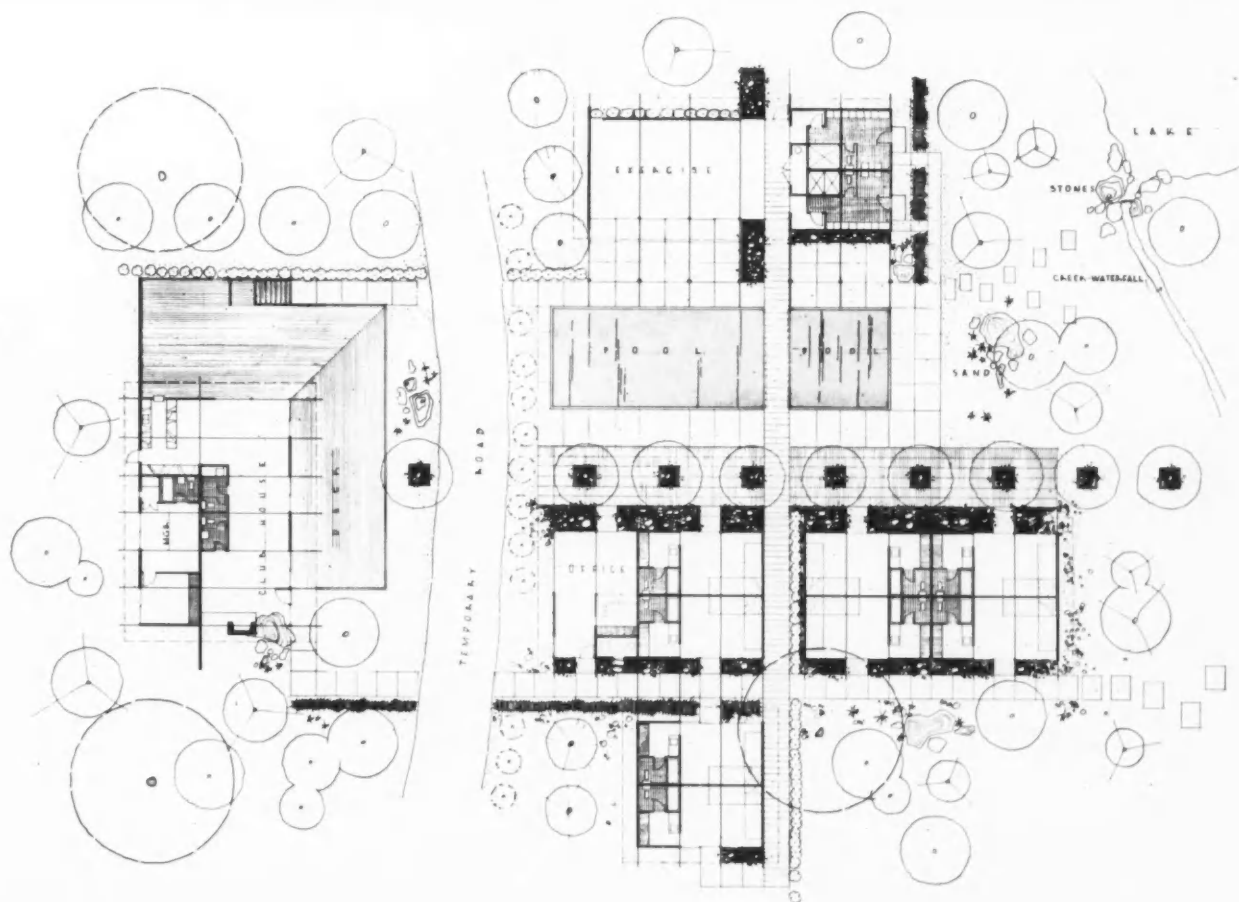
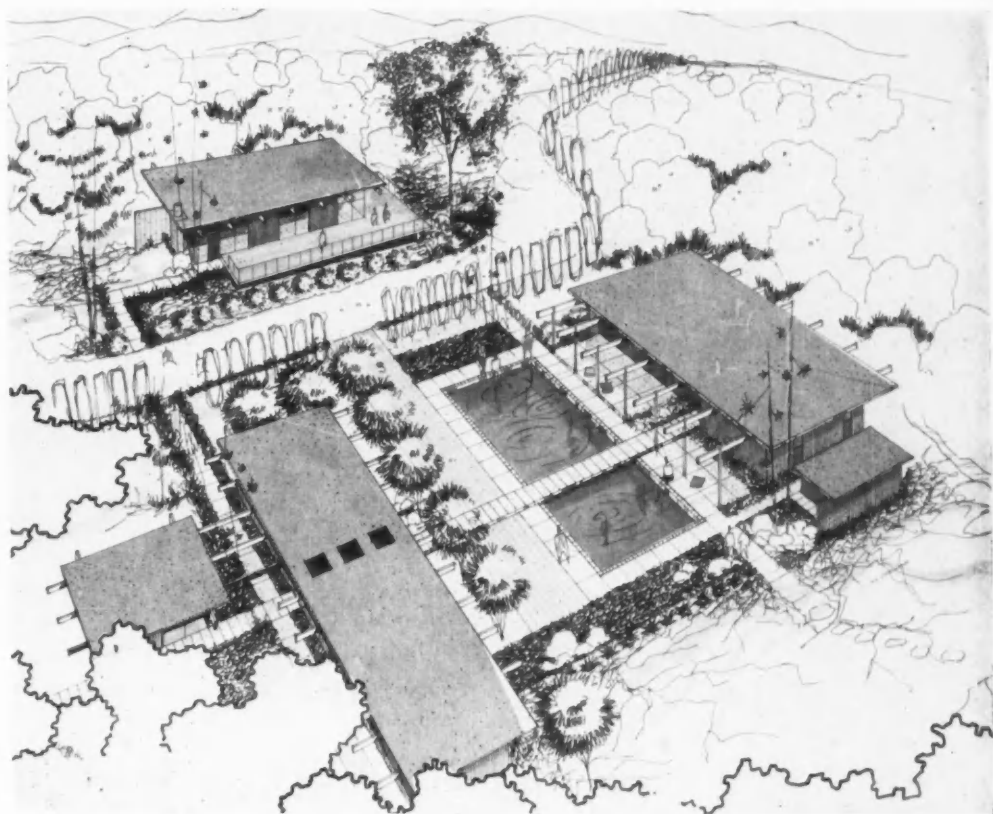




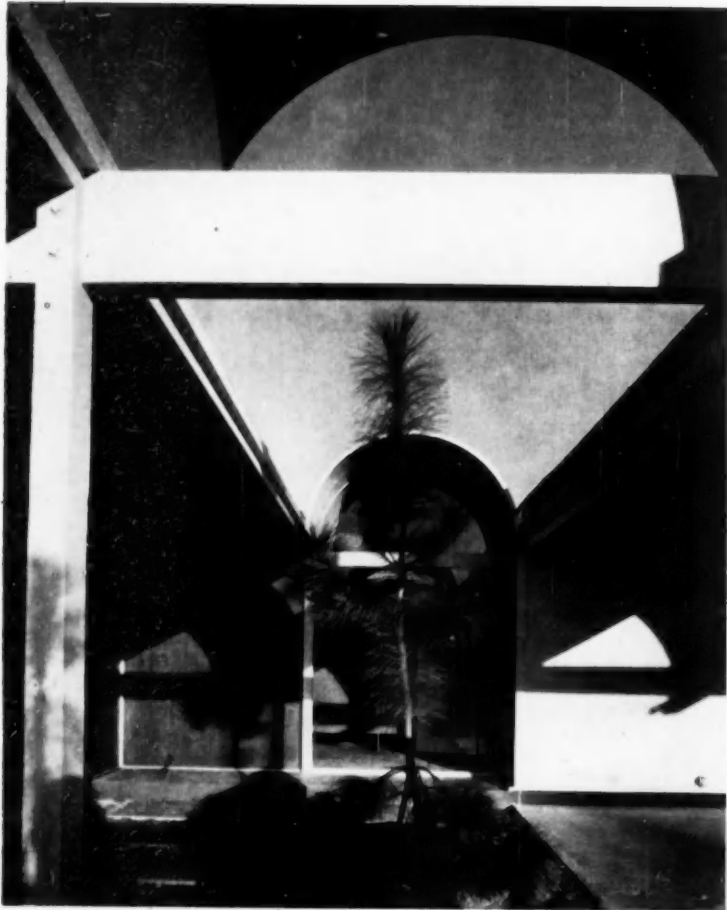
This project was for a private club in the mountains designed to be a place for relaxation and creative activities. The site is a 40-acre mountain property in the midst of beautiful natural flora such as live oaks, manzanitas, and native bush. One of the essential requirements was to make the project extremely flexible since it is to be the beginning of a larger project which will in the future be developed in the shadow of a large rock formation dominating the entire area.

The large deck spreading from the floor-to-ceiling windows of the club house provides an easily accessible outdoor entertaining area overlooking the pool site. The kitchen was kept simple since only occasional meals will be served. Large steel-frame glass sliding doors open up from the exercise room to the 60x20 heated swimming pool over which a walkway connects the building with the guest accommodations which are located under a group of large oak trees. The guest rooms are so oriented that through the large glass areas one has a full panorama of either the mountains or the pool site.

The construction is exposed post and beam framing with 2x6 tongue and groove roof deck. The roofing is gravel-surfaced composition over board insulation; all glass doors are sliding steel units; most of the exterior and interior wall finish is 1x4 tongue and groove redwood siding finished with a bleaching oil. Colors are closely integrated with the surroundings with carefully placed small bright accent colors.



## HOUSE BY RICHARD L. DORMAN AND ASSOCIATES. ARCHITECT

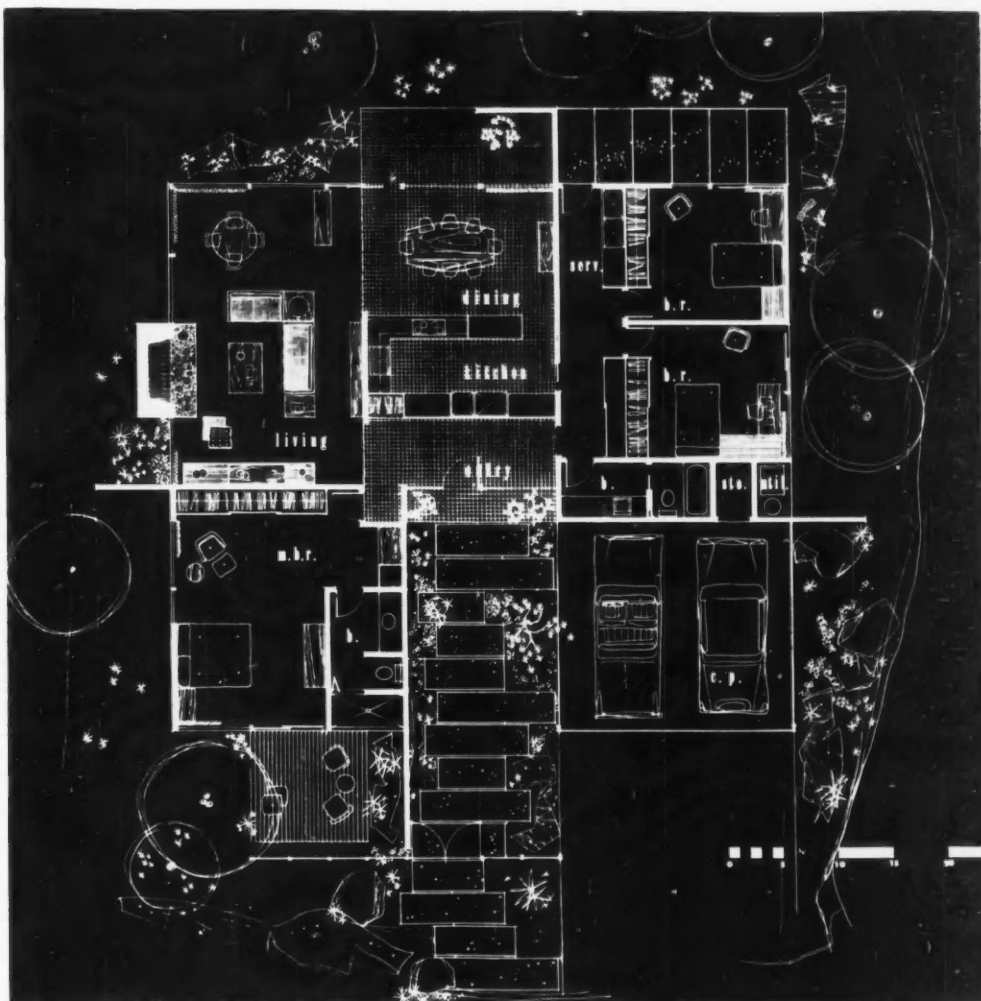


The use of the vault-form roof, while not new, is an interesting adaptation in the use of modern materials. The project was to do a series of vaults over the entire living and carport area. The vaults were designed to be a true vaulted form with the vaults acting in both directions and not merely plywood spanning between structural beams.

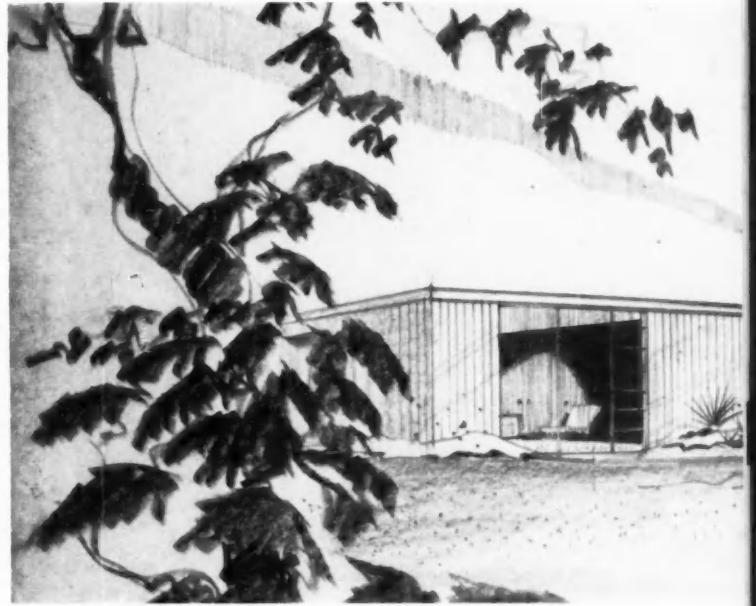
A 7-foot module was used with 4x6 Douglas Fir beam members supported on 4x6 posts. Two sheets of  $\frac{3}{8}$ " of Douglas Fir plywood were glued together and pre-formed out of 4'x10' panels to the shape required. The plywood vaults were designed with their tongue and groove connections to each other and their connections to the 4x6 transfer beam forming an integral structure spanning in both directions. The living room span is 28' with the vaults sloping to the front 3" providing gutters at each intersection. The vaults were roofed with 200 lb. paper and hot mopping. The roof was also sealed with a plastic coating.

The floor plan has been designed to segregate the master bedroom from the two children's bedrooms. The master bedroom is placed on the north side of the house along with the living room to take advantage of a hillside view overlooking a broad valley. The kitchen has been placed in the center of the house as a pivot point for control over the two children's rooms which are, in turn, served by a play entrance from the rear door. The service porch has been placed near the rear and opposite the children's bedrooms to provide easy access to the play area and convenient storage of soiled clothes.

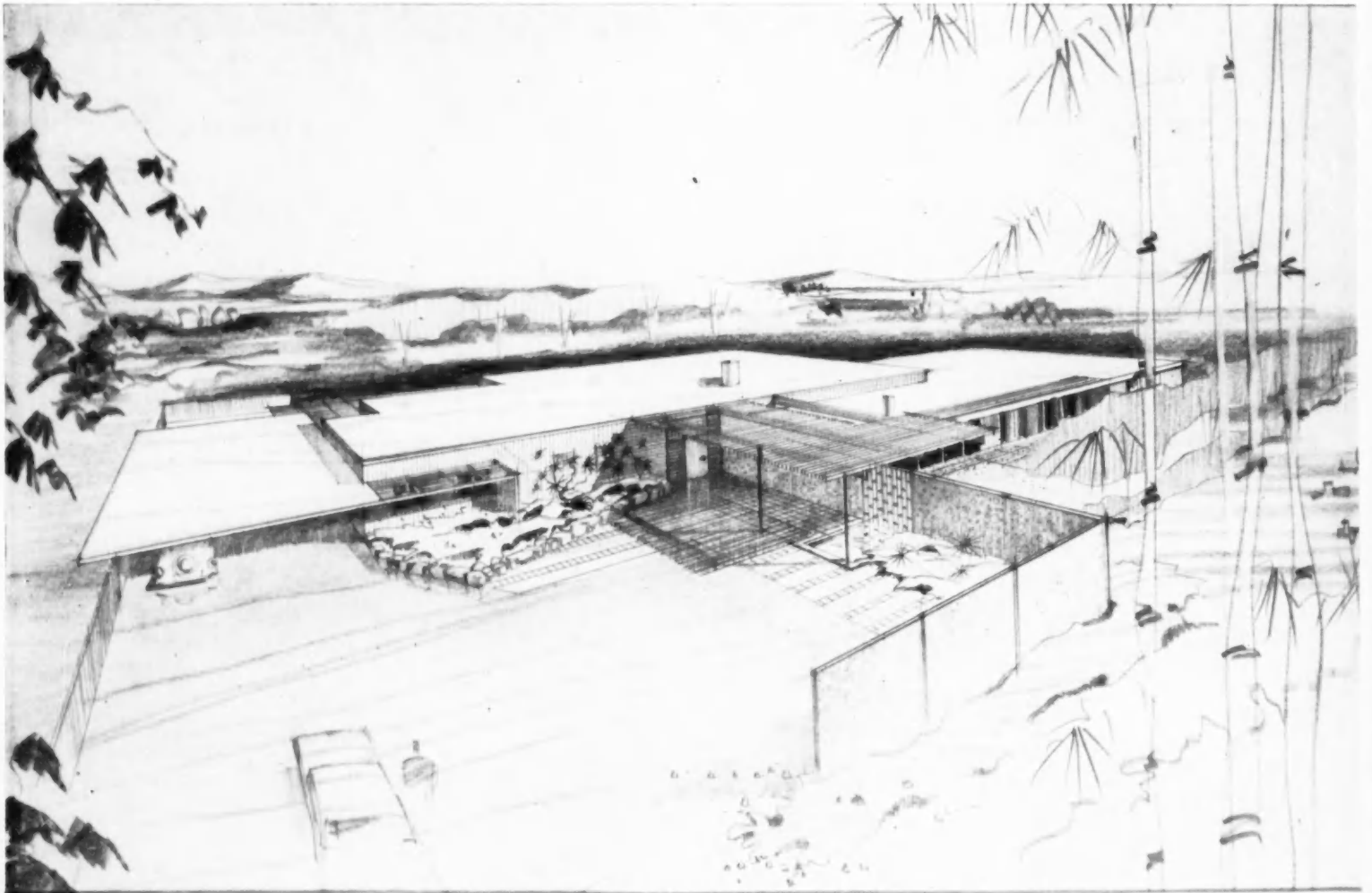
Materials in the house are concrete slab floor, polished stone aggregate floors at the entry, kitchen and dining room; walnut paneling for cabinets, and walls of plaster and redwood siding. The focal point of the house is the entrance way with textured concrete slabs, boulders and pine trees.



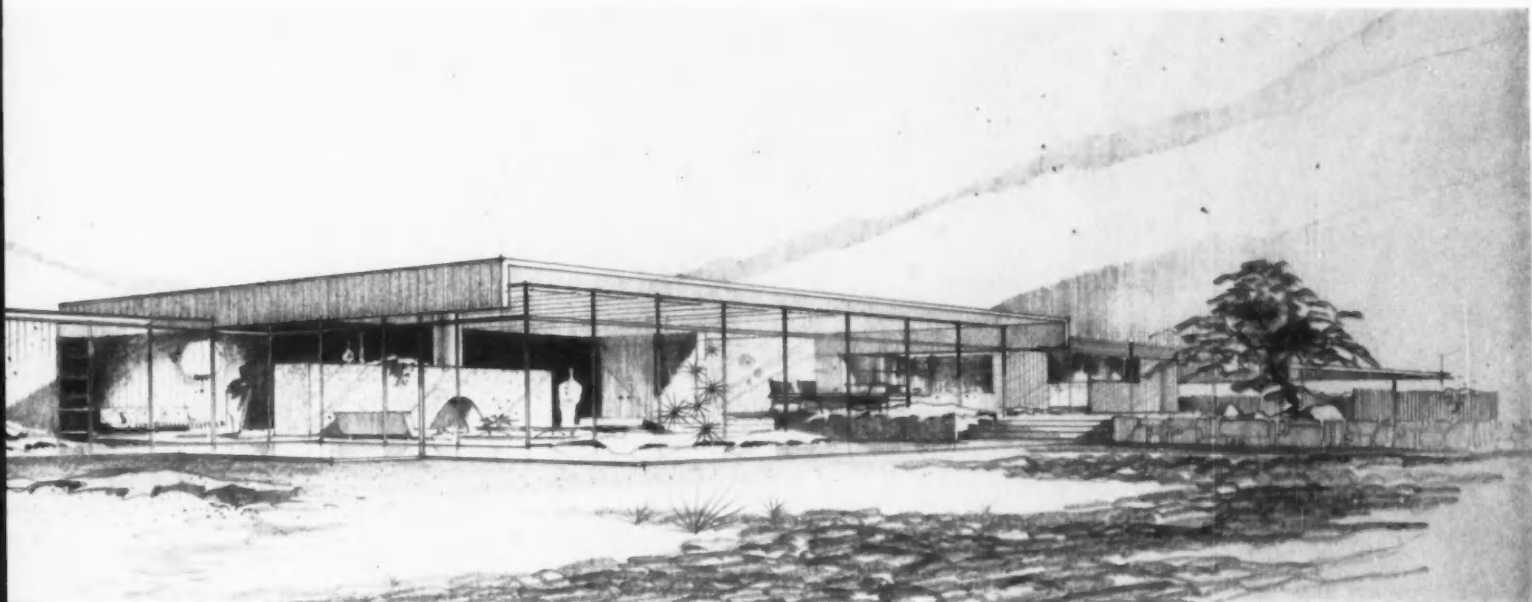
PHOTOGRAPHS BY MARVIN RAND



HOUSE BY GEORGE VERNON RUSSELL AND ASSOCIATES, ARCHITECTS





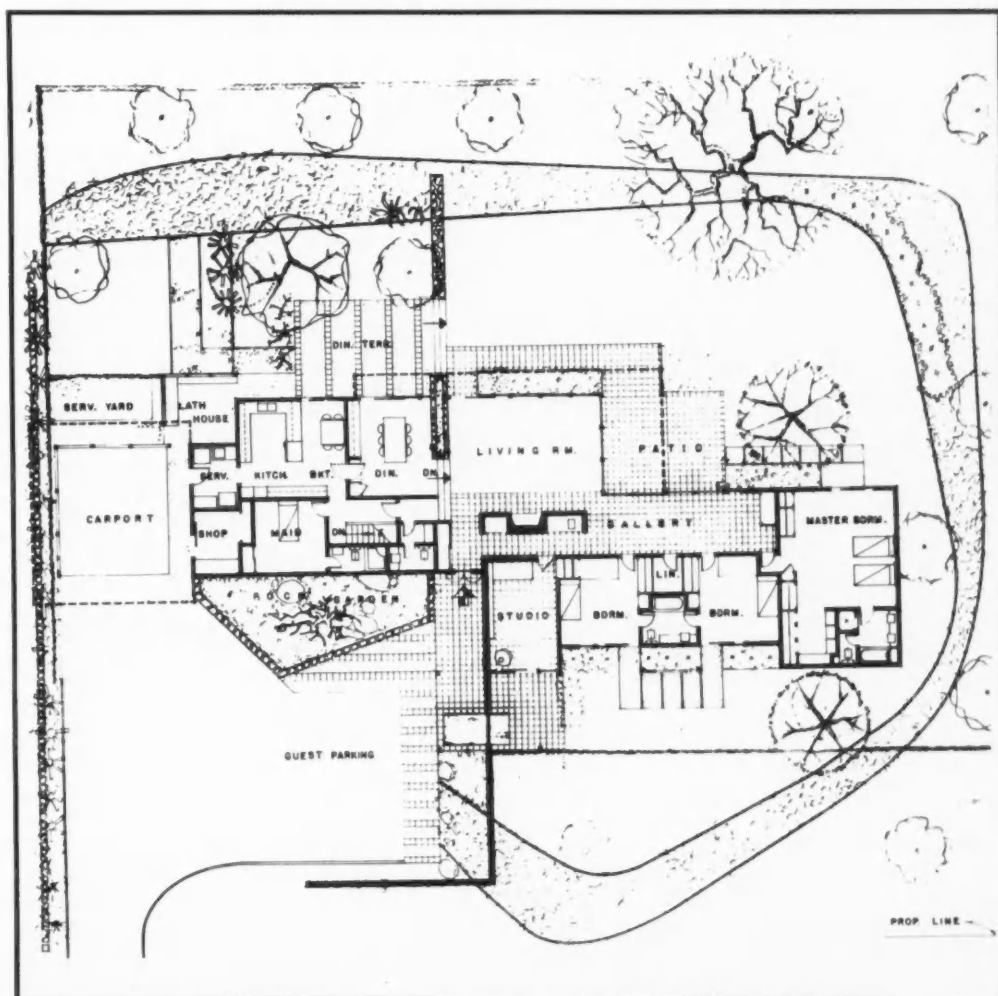


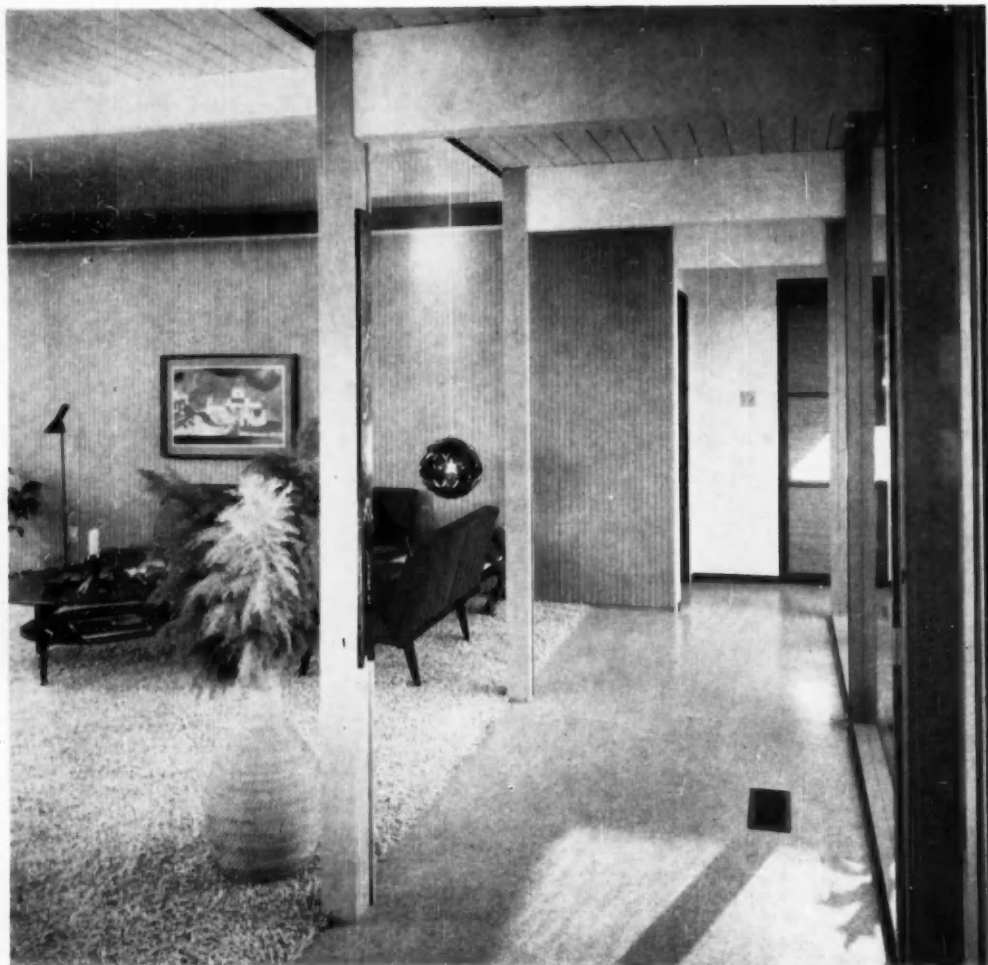
The site is on the corner of a suburban thoroughfare and a secondary road. Nearby high mountains provide a dramatic back-drop to the north and all effort has been made to feature this view. A generous set-back, location of carport, service and potting shed facilities, walls and major trees provide a high degree of insulation from the traffic noises of the major avenue. Orchards on the immediate north and east sides of the site insure privacy from nearest neighbors. In view of heavy traffic on the main avenue, the secondary street was used for access to the motorcourt which gives little indication of the openness of the facade facing toward the mountains. However, shaded guest bedrooms and study openings on the south are vaguely suggested through a metal grille separating the motor court and a bedroom garden surrounded by a high fence of cypress palings.

The guest entry is a part of a long gallery which runs behind a free standing fireplace and serves as a recreation area as well as circulation to study, large porch, and the three master bedrooms. A convenient but unobtrusive bar is incorporated in the free-standing fireplace mass and is also reached by the gallery. The arrangement gives a feeling of great openness of plan and forced circulation through the living room is avoided. An 18" change of level occurs between living and dining areas. Steps and a local stone planting area which continues through the huge glass north wall form a psychological barrier between dining and lounge areas. A wooden ceiling is common to both areas and the feeling of great space is accentuated by continuing the same wood in a 5' overhang to the north and a 15' overhang to the east. The ceiling, interrupted only by glass, extends nearly 60' east and west and in some cases about 35' in a north-south direction.

Gray stained, saw-sized redwood "board on board," dull orange painted trim, local cobble

(Continued on page 34)





FRONT ELEVATION OF MODEL NO. 91



## TRACT PROJECT BY ANSHEN AND ALLEN, ARCHITECTS

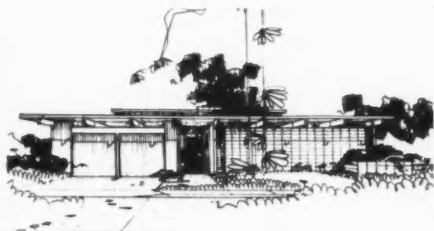
FOR EICHLER HOMES

This is the work of Anshen and Allen who are responsible for two of the four models to be available in the new Eichler Homes development in Orange County, California. We show the interiors for model No. 81 which was recently opened to the public. All houses on the 38-acre project, to be known as Fairhaven, will be air conditioned and will have four bedrooms, two baths, an all-purpose room, separate dining space and a garden court entry.

The Eichler development has been an outstanding example of cooperation between the builder and first-rate architectural firms for the purpose of designing contemporary homes to be built for the medium income public. The program, from its beginning, has resulted in the initiation of many innovations in floor plans, materials, and equipment. In these most recent examples, a garden entry court has been used in all models to double as a patio and play yard that serves the purpose of providing separation between the living and sleeping functions of the house. All the units are planned carefully in relation to each other in order to provide privacy for the individual family and to maintain an overall unity in the planned neighborhood.

While each of the four floor plans available at the development has individual features, the standards arrived at by the builder's long experience have been fully used in all floor plans. This latest of the many projects again reaffirms the fact that the promotional builder can, within the stringent economics of his trade, utilize not only the best materials available in the most useful and intelligent way, but can bring to the home owner the art and the design skill of the best architects.





FOUR BEDROOMS.TWO BATHS..MULTI-PURPOSE ROOM



ELEVATION OF MODEL NO. 81. THE SECOND OF THE TWO HOUSES DESIGNED BY ANSHEN AND ALLEN FOR EICHLER HOMES



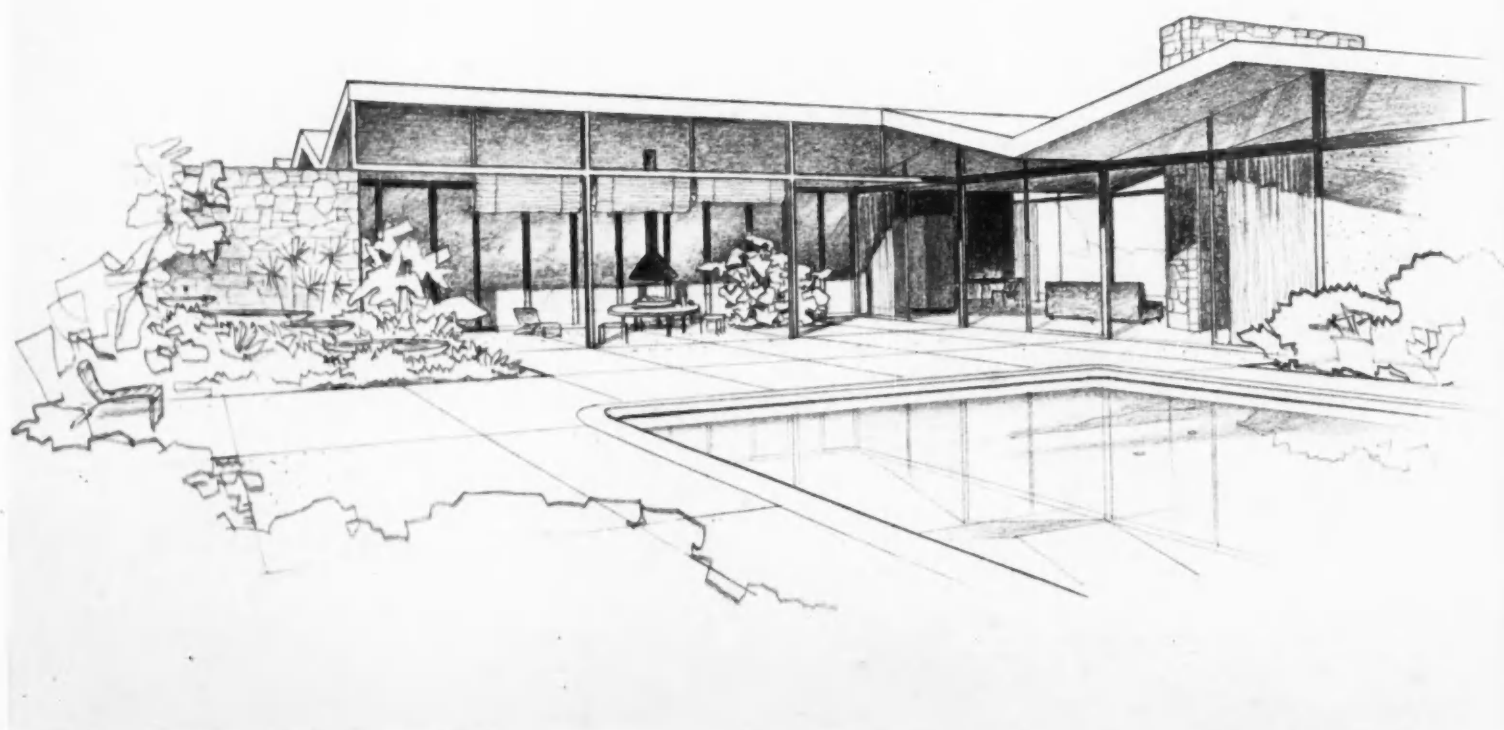
PHOTOGRAPHS BY MARVIN RAND





HOUSE BY THORNTON M. ABELL, ARCHITECT

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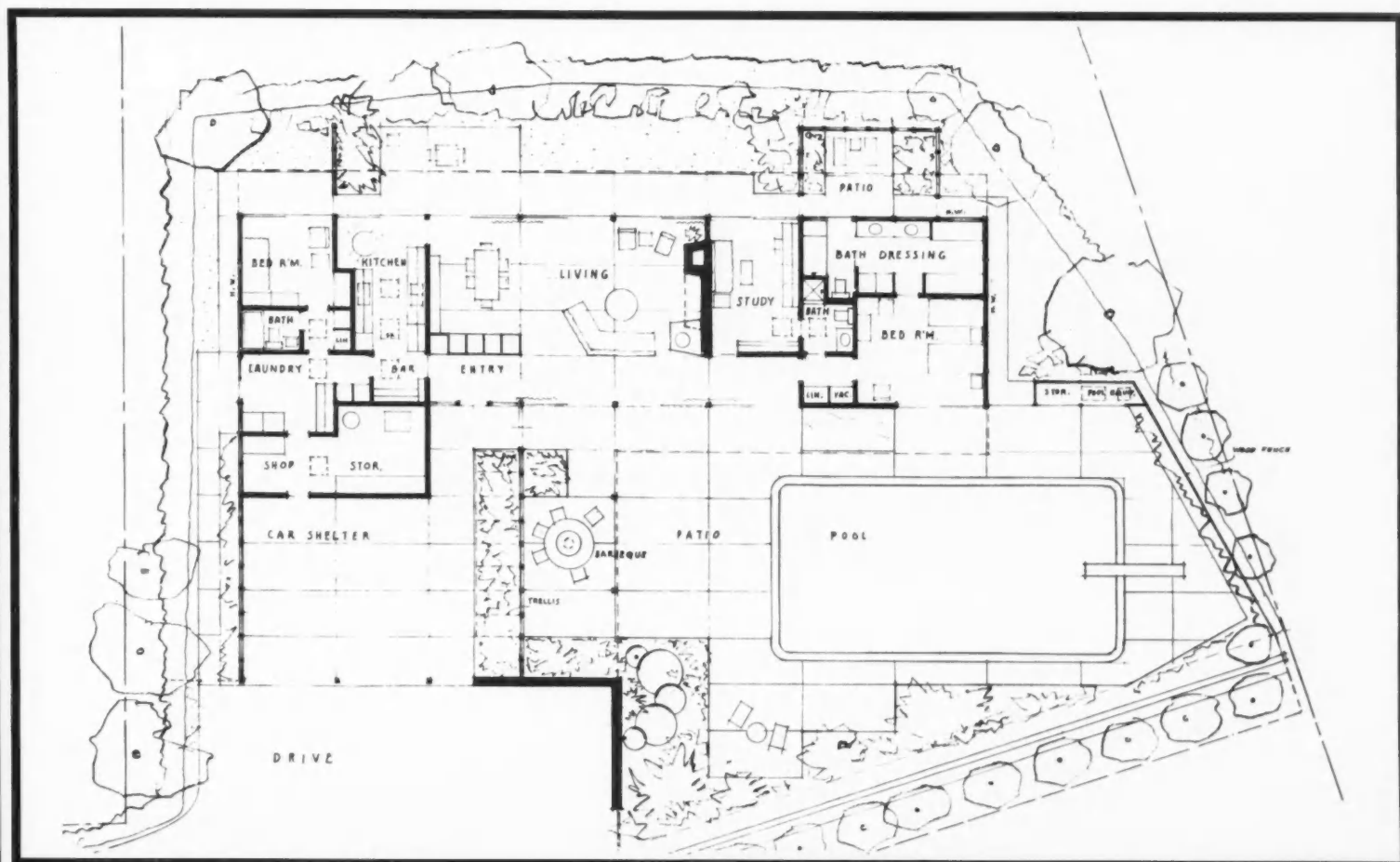




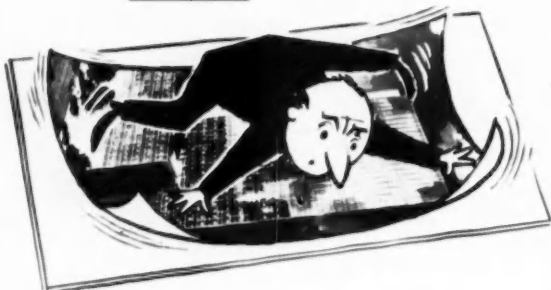
The site is a plateau, cut into the side of a wide canyon. The 45°-slope behind gives complete privacy from that side, as well as cutting off the late afternoon sun.

The requirements of the owner were varied and specific. As developed, the design provides the following: parking for guests, a car shelter for two cars, and a spacious entrance; a large living area with dining space at one end, baffled from the entrance by a storage wall, with coats on the entry side, and radio and recording equipment, Hi-Fi speakers, projector truck, film, tape, record storage, silver, etc., on the dining side. Photography of all types is an active hobby. There is a pull-down projection screen at the fireplace to allow comfortable viewing of pictures. Off the living area is a sheltered terrace adjacent to a large swimming pool. On the terrace is a barbecue for outdoor entertaining. The kitchen is fully equipped and has a dining area at one end and a work bar at the other. Under the bar counter are two serving carts. Adjoining the kitchen is the laundry, and a workshop accessible from the car shelter. The shop is a place for using power tools, with general storage, including winter sports equipment. At the same end of the house are a separate bedroom and bath that could be used for a guest or servant. Beyond the living area is a study where quantities of medical bulletins and books are stored. A long glass-top desk acts as a splicing bench for film. The television is used in this room. A small bath serves as a guest powder room. At the end of the house is the owner's room with access to the swimming pool. A large dressing room and bath are combined but separable by

(Continued on page 34)



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#### CASE STUDY HOUSE TRIAD—KILLINGS, BRADY AND SMITH (Continued from page 23)

perennials will be stressed. Numerous olive trees are being moved in to soften the stark lines of the buildings. These combined with Lemon Eucalyptus, Scarlet Bougainvillea, Bignonia Violacea, fern textures and the many fragrant plants associated with La Jolla will provide the base for the landscaping. All tricks and contrived forms are being avoided, with the landscaping providing a softening for the simple building forms.

The furnishing of the houses is well under way by Stan Young for Frank Brothers. The general expression of each house will be: House "A"; a restrained formal atmosphere with understatement of color and form with accent on some good older pieces. House "B"; a warm highstyle interior with good contemporary furnishings; all informal in character, but expressing the flexible living spaces. House "C"; warm informality with use of natural woods and rough textures compatible with the Davidson brick floors in the entry and terraces.

#### NEW CITY HALL—REVELL, CASTREN, LUNDSTEN AND VALJUS (Continued from page 22)

The council Chamber is planned to accommodate the Mayor or Chairman, distinguished guests, the clerk, thirty elected representatives, twenty department heads, and the press. There is also public seating for 310 persons, and provision for televising. The circular space within the Nucleus is divided by a curved screen separating the members' lounge, and anterooms on the level below, from the chamber itself. A continuous area of glass is provided around the perimeter of the Nucleus, offering a fine view to anyone at gallery walkway level within, and particularly from the members' lounge which overlooks the Civic Square.

A typical office provides completely uninterrupted open space with the exception of the service core area. This space can be subdivided in different ways. Between the internal service core wall and the external structural wall of each tower, all services are located, such as elevator shafts, mail conveyors, air conditioning ducts, pipes and cables. Washrooms, toilets, vaults, storage space and stair towers are also located in this area. The planning includes space for a lunch room or rest room at one end of each tower floor.

#### HOUSE—GEORGE RUSSELL

(Continued from page 29)

stone, a high motor court wall with a special exposed aggregate texture developed by the architect and grayed yellow ceramic tile paving are used in the exterior and are carried into major rooms of the house as interior finish. A generous basement provides room for utilities and major storage. Plastered bedrooms are simply detailed. Large but shaded glass areas lead to garden areas. However a detail incorporating awning sash with sliding doors affords ample and controllable ventilation by windows if desired.

Colors and materials were suggested by the rocky areas in the neighborhood, the rich green and orange of the surrounding orchards and the compatibility of wood with the suburban life. Fluidity of space makes entertaining very easy—a basic requirement of the owner—and the south fenced garden offers excellent play area for visiting grandchildren. The landscaping was designed by the architect.

#### HOUSE—PANCOAST, FERENDINO, SKEELS AND BURNHAM

(Continued from page 19)

living spaces remain open to the west. In cold weather, the guest room may become part of the living areas through the use of sliding partitions. Four-zone, reverse cycle air conditioning has been provided to handle the unusual Florida weather extremes.

A partial list of materials includes:

- Concrete filled steel columns
- Cemesto panel, aluminum batten exterior walls
- Cypress interior walls, ceilings and fascias
- Drilled asbestos cement board shade and privacy screens
- Native fossilized coral stone paving
- Cork tile floors
- Fiberglass insect screen
- Laminated Fiberglass translucent panels

#### HOUSE—THORNTON ABELL

(Continued from page 33)

sliding plastic panels. The tub is sunken. Outside the bath is a sun-bathing patio with a plastic screen enclosure.

#### CONSTRUCTION AND MATERIALS

Due to a deed restriction requiring a 3 in 12 pitch roof, the roof is a series of repeating pitched planes, supported on steel beams and steel columns. Glass walls are sliding aluminum doors with fixed glass above. Filler walls are wood frame with exterior plaster and interior drywall, with glass louvers above 8'-0". Exterior soffit of roof planes is exterior plaster, and interior ceiling surfaces are acoustic plaster. Vinyl floor finish in service areas; ceramic vitreous tile in baths; terrazzo in living areas; and carpet in the master bedroom and dressing room. Exterior paving is pebble concrete. Local stone is used for fireplace and garden walls. Visual barriers and screens are Fiberglass plastic.

#### ART

(Continued from page 8)

past two years, and that his subtly-textured relief constructions introduce several fresh ideas for mural sculpture.

We've been thin on painting exhibitions this month—not in quantity of course but in quality. I was interested however, to see Theodoros Stamos' new work at the Emmerich Gallery. Interested and rather disappointed. While Stamos has gained finesse in his technique, and while his resounding colors—russets, black-browns, purples and deep reds—cannot fail to please, his motifs have been pitilessly reduced.

In fact, he offers a single composition: a central mass that runs vertically from top to bottom of the canvas, dividing the flat terrain on either side as a river divides a landscape. I can understand Stamos' desire to reduce his means, but I regret the serialized repetitions. The lyricism that used to be fed by direct observations of nature is starved out and hasn't been replenished. By limiting himself to what amounts to a rigid scheme, Stamos cuts off the very sources that made his former paintings live.

#### MUSIC

(Continued from page 12)

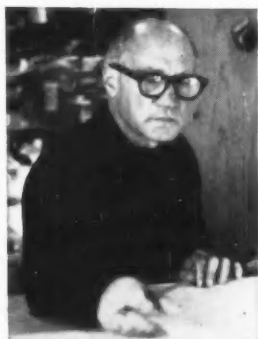
25 tones have appeared. The pieces were not instrumented until 1958. All are interesting; the last may raise comparison with more recent work by Elliott Carter. As a result of these pieces Cage was directed to study with Schoenberg.

*Construction in Metal* (1938) has a rhythmic structure "based

(Continued on page 36)

The home's welded steel frame utilizes light beams and columns on 10-foot centers, with clear spans up to 30 feet. Gerald Weisbach assisted in design; consulting engineer was William Porush; general contractor was Frank McCauley; steelwork by Independent Iron Works, Inc.

## For contemporary homes Soriano designs with steel



Few architects specializing in the residential field have exercised so profound an influence as Raphael Soriano, AIA. Recipient of many honors, Soriano was again recognized by an Award of Merit in the recent *Sunset*-AIA Western Home Awards competition.

The award-winning home, located in Mill Valley, California, has a modular steel frame which carries the living area on a single level out over a steep slope—avoiding the usual grading, and preserving the site's magnificent



trees. And not only was the steel framing economical, but it went up fast. The steelwork for this and a neighboring home was erected in only a day and a half.

In Soriano's words, "It has long been my opinion that the modular steel frame offers the greatest flexibility for the design of both custom and tract homes. With this system we can suspend the structure over a hillside or include an open patio within the home without losing the delicacy of concept so characteristic of steel."



Long, open spans, the absence of conventional interior walls, and the lavish use of glass give this 1,500-square-foot home the spacious feeling of a much larger residence. Steel decking provides an interesting ceiling pattern. Plastic domes admit light to inner areas.

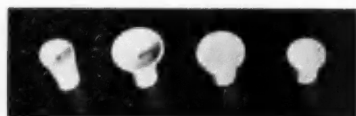
You can obtain a free copy of our booklet, "Light Steel Framing," describing homes and other light-occupancy structures, by writing to Publications Department, Bethlehem Steel Company, 3494 Rincon Annex Station, San Francisco 19, Calif.

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# BETHLEHEM STEEL





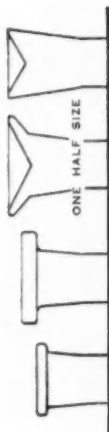


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## MUSIC

(Continued from page 34)

on the duration, not of notes, but of spaces of time. The whole has as many parts as each unit has small parts, and these, large and small, are in the same proportion." This system resembles the *Tala*, or rhythmic sequence, of Indian music, plus "the Western characteristic of a beginning and an ending." The whole is a study in metallic sounds and overtones, far more realistic than Mosolov's once famous *Iron Foundry*, though in no way descriptive.

The first of several *Imaginary Landscapes* anticipates *musique concrete*. It is a composed recording, using telephone company testing records of constant and variable frequencies, without overtones, plus a cymbal and a string-piano (the struck strings muted by hand). Among the other *Imaginary Landscapes* are the famous *Concerto for 12 Radios and 24 Performers* (No. 4) and the "first piece of music for magnetic tape made in this country" (No. 5, 1952).

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Cage's intention in *Landscape No. 1* was to compose a work which would be as a recording the equivalent of an easel painting. The *Williams Mix* (1952) continues this direction, substituting tape for record. Some 500-600 sounds, catalogued as city sounds, country sounds, electronic sounds, musical sounds, etc. were assembled on separate tapes, further classified by pitch, timbre, loudness, and degree of control. "The composing means involved chance operations derived from the I-CHING (Chinese BOOK OF CHANGES) . . . Briefly, three coins tossed six times give one or two numbers from 1 to 64. Separate charts were made having 64 elements, one to determine the rhythmic structure," another for shortness or length, 16 for sounds and silences, 16 for durations, 16 for attack and decay of sounds. And so on through a series of operating regulations. This is Music by Chance.

The response of the Town Hall audience, elsewhere favorable, divided equally between approval and boos, after hearing *Williams Mix*. I don't dig it myself. This is one case where, in my opinion, the theory interests more than the result. Cage's best work concentrates the attention; this diffuses it. Similar diffusion is present in many works by Boulez, Stockhausen, Nono, Maderna, by comparison with which the strong concentrating effect of Cage's methods, when successful, may be estimated.

A further development of the *Williams Mix* is the *Fontana Mix*, some of which is heard breaking horrendously through the stories of Cage's *Indeterminacy*.

Hereafter in Cage's compositions there is no such thing as a "work." There are just the occasions according to or within which a musical event happens. The recorded album preserves a group of such fortuitous events as they happened on one occasion before an audience at Town Hall. Playing the same record a second time one has already passed outside the limiting circumstance. These works are not meant to "endure" infinite repetition, like the Beethoven symphonies. Each performance will be as casual, final, controlled by its own circumstances and independent of all others as a street accident.

*Music for Carillon* (1954) takes into account that a bell's resonance cannot be strictly delimited, successive tones will overlap. In composing this music, by chance operations, the position of a tone in time and pitch is determined graphically by measurement on a page, the height determined by the size of the keyboard, the width by the intended duration. Unfolded, pre-cut paper sheets were placed "one at a time at structural points in the area" and the graph inscribed through the cuts. Chance operations, of which no record was kept, determined every step of the process.

Now the one vulgarity of a carillon, however beautiful its sonority, is its being reduced to beating out a tune. Such grandeur should ring out across the heavens nothing but a peal of bells. The ringing of changes is one method, yet the sequence of changes is fixed and of long practice. Cage has devised a method which seems to restore the free pealing of the bells. Here, rather than in the more extraordinary of his combinations, Cage's method of chance compels acceptance. Given a computer and similar fixed and variable indicia, a carillon might go on from hour to hour through the years never repeating itself. And note that, in the nature of the carillon medium, which has always fought with harmony, the sound is liberated by this means into its pure tones.

I have summarized the historic chronology of this recorded album to focus attention on John Cage's *Concert for Piano and Orchestra*, the summation of all these methods. It will be for the candid listener either the final glory or the final frustration of his searchful listening.

Cage writes: "The *Concert* . . . is without a master score, but each part is written in detail, both specific directives and specific freedoms being given to each player, including the conductor. My intention in this piece was to hold together extreme disparities much as one finds them held together in the natural world, as for instance in a forest, or on a city street." Lou Harrison said, when I had played the *Concert* to him: "John's music is descriptive, a vegetable growing, a description of all natural events."

"The conductor, by his gestures, represents a chronometer of variable speed. Harmonious fusion of sound is not an objective. For audible and visual clarity the players are separated in space as far as is convenient in a concert hall. The pianist's part is a



"book" containing 84 different kinds of composition, some, varieties of the same species, others, altogether different. The pianist is free to play any elements of his choice, wholly or in part or in any sequence." The orchestra may be a solo instrument or any number of players, a performance may be of any length. Cage declares: "I regard this work as one 'in progress' which I intend never to consider as in a final state, although I find each performance definitive."

"The composing means employed involved chance operations derived from the I-CHING, and the observations of imperfections in the paper upon which the part is written." This last bravura comment is typical of Cage's mind at its fighting best.

The notational means are far too elaborate for each part to be summarized here. Each player must be trained and accustomed separately to his individual freedom. For the secluded, routinized intelligence this suddenly posed threat of freedom can be terrifying. Cage remarks that the problem is as much social as musical. The player must be induced to share in the common experience, not sabotage it. When Schoenberg first conducted a program of his works with the Los Angeles Philharmonic, some of the players deliberately played wrong notes to ensure failure. An anxiety in the player causes him to prefer being wrong deliberately rather than inexplicably right. Cage poises his work at the edge of chaos but is grieved when by indiscipline among the players it becomes chaos.

Orchestral players often believe that a composer of unusual music conducting his own work cannot distinguish wrong from right notes. Schoenberg was not deceived, and Cage, even among the vast repertoire of possibilities he has allowed his players, knows what has been done badly and what well.

For the *Concert* as a musical composition I can only repeat the words I wrote John Cage after hearing it the first time. I had not then read the notes or digested any of the theory.

I wrote: "The *Retrospective* is enchanting—I mean the full meaning of that word.

"Listening to the *Concert* is like walking out in the mountains under a night full of stars, a lazy enormity and nothing in the way of anything else. Like non-representational painting it fills the area it creates. Only it goes beyond painting, because there the limitations of the medium and the museum destination are in the way."

The *Concert* is not what I had imagined but something that, for other reasons, I had become ready to expect.

#### NOTES IN PASSING

(Continued from page 15)

is even more difficult to look beyond national boundaries and draw overall conclusions from uncoordinated events taking place in the four corners of the earth.

There is a wide gulf between what the student has learned and what the man of action has failed to learn and assimilate in a world which is in rapid and perpetual motion.

There remains one final aspect: future prospects. What we have to do, I suggest, is to write the history of future international relations, and this without having recourse to fortune-tellers, seers or prophets! Not that we can work out this history of tomorrow in detail, but its main lines of development can be foreseen. Once we have forgotten or unlearned hatred, we shall have to build anew; and, in that connection, we shall have to demonstrate, by suitable examples, the impossibility of nationalistic isolation. This brings us to a delicate point. There can be no denying that there is a rising tide of nationalism over a large part of the globe. It cannot be turned back, and it is useless to oppose it: it must be harnessed. Nationalism is out of date. It has come too late in a world which is too old. It is, in any case, a necessary stage, and the wise course might be to shorten that transition from one state to another as far as possible. But it would be futile to ignore it, and even more so to discount it.

It has to be accepted, as a necessary good or evil. And I really mean "necessary": even if it is an outmoded concept made obsolete by the advance of modern thought and science, a dose—or fit—of nationalism enables countries which have just achieved independence to gain a clearer knowledge of themselves in all fields, and especially in the cultural field. They rediscover their language, their literature, their poets, their historians and (more rarely) their scientists.

This reawakening sometimes has its childish aspects. Let us

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Once this outburst is over, another aspect of the problem arises: the need for close collaboration in all fields and especially in that of culture, for exchanges in all forms, for interpretation and interdependence, for action directed along two distinct but not contradictory lines.

Such is the first task in which a little nationalism does not come amiss, to bring about the revival of a country's culture and restore to it its former glory (for all cultures are glorious), to invigorate and foster it, making it dynamic, modern and inspiring through contact with other cultures—in our case, the Western cultures or culture. And this must be done straightforwardly and candidly without ulterior motives, and with that feeling of respect which is essential in any task. True there must be no imitation, but neither must there be any hesitation in learning.

What we have to do, above all, is to drive home the need for human fellowship. That is yet another elementary truth, but it seems essential today to repeat such truths continually. They are accepted in principle but ignored in practice.

CHARLES AMMOUN—UNESCO

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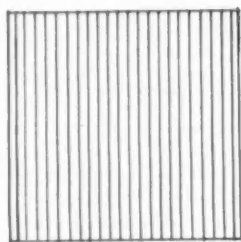
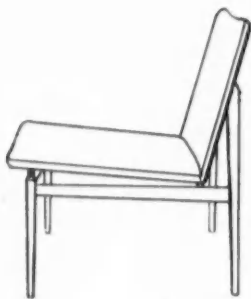
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